ABSTRACT OF AN

Address

ON

MEDICAL LONDON OF THE EIGHTEENTH CENTURY.

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DR. POORE said that it had been his privilege some years ago to give to the society an address on "London, Ancient and Modern, from the Medical Point of View," and he thought it advisable on this occasion to begin where he had left off last time. Not that much excuse was wanted for choosing such a subject as "Medical London of the Eighteenth Century." Conceit was a great characteristic of man, and men of the present day were much inclined to think that never were there such creatures as themselves; for this reason it was sometimes beneficial to look back and see who were their ancestors, what a debt they—the men of the present day—owed to them, and what great men they were. He thought that the process of looking back was made allowable by the lines so well known which Tennyson wrote in his "In Memoriam" when echoing a thought of Goethe's:—

> "I held it truth with him who sings
> To one clear harp in divers tones,
> That men may rise on stepping-stones
> Of their dead selves to higher things."

Among the medical pioneers of the seventeenth century ranked such men as Bacon, Harvey, Sydenham, the founders of the Royal Society, and the great philosopher John Locke; they erected a platform, as it were, on which their successors of the eighteenth century were able to play by no means an ignoble part. The medical profession at the beginning of the eighteenth century was divided more strictly than at present into three grades: first came the physicians, who were men of learning and highly educated; they all had been to the University but they were mostly men whose learning was derived entirely from books and in this was their defect. Secondly, there were the apothecaries who were tradesmen with a smattering of scientific knowledge, working their way upwards in a good cause. The third class consisted of the surgeons who at that time held the position of handicraftsmen and not of scientific men; for they had sprung from the barbers, from whom they did not separate till 1745. If a man wanted to become an apothecary he was apprenticed, learning the trade and as much science as his master could teach him; if he wanted to become a surgeon he was also apprenticed but his course was not very clear. To show the education of a surgeon at the end of the seventeenth century and the beginning of the eighteenth Dr. Poore related the life of James Yonge, a surgeon of Plymouth. Yonge was born in 1646 and at the age of 11 years was apprenticed to Mr. Richard, surgeon of the *Constant Warwick*, a ship of 31 guns and 130 men; in 1661, when only 15 years of age, he was appointed surgeon's assistant to the *Montague* (64 guns and 240 men) and was present at the bombardment of Algiers; his duties after the battle were to dress the wounds, boil the gruel, make the barley water, mix the poultices, roll the bandages, give the clysters, make the hammocks, shave the men, and trim their hair. In 1662 Yonge spent four months with Mr. Clark, an apothecary of Wapping; in 1663 he was engaged to go, as surgeon of the *Reformation*, to Newfoundland; and in 1665, when 19 years of age, he was appointed surgeon to the *Bonaventure* and while holding this position was taken prisoner by the Dutch. Finally, in 1670, at the age of 25 years, he settled at Plymouth after 14 years' service at sea and there obtained, says Dr. Munck, "a considerable amount of business," notwithstanding his young years and in spite of only (!) 14 years' active practice. He married well and by his wife's influence became surgeon to a naval hospital at Plymouth; next he seems to have broken out as an author and written "Curzus triumphalis de Terebintho," a book in praise of turpentine as a hæmostatic. He enjoyed a large practice at Plymouth and became mayor of the town in 1694. In 1692 he was made free of the Surgeons' Company and in 1702 was admitted as an extra Licentiate of the Royal College of Physicians of London and became a Fellow of the Royal Society, and in 1721 he died. This was the sort of haphazard education an ordinary surgeon had in those days. The physicians got their education in a scarcely more satisfactory manner; they went to Oxford or Cambridge and there the hand of the clergy was still heavy on the Universities and medical and scientific studies were not encouraged and there were great difficulties in the path of those wishing to acquire a knowledge of medicine. One of the earliest places in Europe where anatomy was taught was the University of Padua; perhaps this was because it was situated in the republic of Venice which had made itself rather independent of clerical domination. At the beginning of the seventeenth century, after the Reformation had established itself more or less in Holland, Leyden became the great university for physicians and medical men who were striving after something higher than was ordinarily to be then had. Many physicians went to Leyden, where they "entered on the physic line" and among them a large number of Englishmen, which may be accounted for by the fact that England was then governed by a Dutchman, William III. More or less all through the eighteenth century our relations were very intimate with the Dutch—Marlborough in his great battles fought alongside the Dutch; Mackay, a Scotsman and a great general who helped William at home and abroad, was an ancestor of Donald Mackay, Lord Reay, the President of this College. The great physician in Leyden was Boerhaave who was undoubtedly a heaven-born genius—one of those men who took all knowledge for their province, who learnt everything and seemed to know everything. Languages—Oriental and modern—botany, and everything there was to be learnt he seemed to acquire in a remarkable way. Now, Boerhaave had some idea of teaching clinical medicine and he saw that it was impossible to do this unless one had material upon which to demonstrate, and his disciple Van Swieten established at Vienna a first-rate clinical hospital.

After this short preface it was necessary to go through some of the celebrated physicians of the eighteenth century, beginning with those who made great names and great fortunes and first among these came Radcliffe. Radcliffe certainly stands out in the seventeenth and eighteenth centuries as a very great personage and a very great physician. He was a Yorkshireman and was educated at Oxford, but he very soon came to London. He was one of those men who did not care a snap of the fingers for authority, and who thought more of Radcliffe probably than of Hippocrates. Endowed with an enormous amount of common sense and great abilities he took a keen interest in the events, medical and otherwise, of the time. The things he said of the apothecaries and the other physicians had better go unrecorded. Two years after his arrival in London Radcliffe was appointed physician to the Princess Anne of Denmark and on the accession of William III. he refused the appointment of permanent physician to the King because, like a calm, calculating Yorkshireman, he knew the King was subject to asthma and that therefore he could make more money by attending him occasionally than if he were attached to the royal establishment at a fixed salary of £200 per annum. So it turned out, for he received an average of £600 a year for the first 11 years of his attendance on the King. Now Radcliffe was abominably rude—rude to everybody, even to the ladies of the Court—and it was astonishing how he held his position *facile princeps* among the physicians of the time. When the Princess Anne summoned him to attend her he refused, saying "Her Highness's distemper was nothing but the vapours." When consulted by William his reply was equally uncourtly—viz., "If he would give up going to Lord Bradford's [where it was rumoured that His Majesty drank too much] he would get better." In 1699 the King, who was suffering from ascites and dropsy of the legs, sent for Radcliffe, and showing him his swollen ankles, said: "What think you of these?" "Why, truly," replied the physician, "I would not have your Majesty's two legs for your three kingdoms." This was the last time that he was consulted by that monarch. Radcliffe lived in Bow-street, Covent Garden, and used to frequent a tavern in the

unsavoury locality of Clare Market, where, it is said, he imbibed too much, and probably some of his rude messages were sent when under the influence of liquor. His garden off Bow-street ran down and touched Sir Godfrey Kneller's garden in Great Queen-street, and these two great men, being friends, had a door opening from one garden into the other. Radcliffe's servants went through the door and "played the bear" amongst Kneller's flowers. This resulted in rude messages between them. Kneller asked: "What was to be done to the door?" Radcliffe replied: "You may do anything you please with the door except paint it." To which Kneller: "I don't mind what I take from you except your physic." Having had this little sparring match they "kissed and made friends." Radcliffe had the reputation of being at once close-fisted and liberal—the former during life, the latter in his will. When he went to the tavern he would very seldom pay for his own liquor; he got someone else to do it, saying that he hated changing a guinea. Tradesmen could not get their bills paid and to a pavior who asked him to settle a small account Radcliffe said: "You rascal, you want to be paid for that; you laid the pavement abominably ill and spread a little earth over it to hide your dirty work." The pavior replied, "Mine is not the only dirty work the earth hides." Radcliffe answered, "You are a wit, are you?" and paid him at once. He used to say that he got on by treating human beings badly and being brutal. He used to open the windows when visiting cases of fever or small-pox and, in fact, placed this regimen in vogue. He perceived that the previous method of treatment by the hot regimen was ridiculous. When he died he left an enormous sum of money; the Radcliffe Library and Infirmary and two medical travelling fellowships at Oxford were bequeathed by him. He also left £500 a year to St. Bartholomew's Hospital towards "mending their diet." A large sum of money was left in the hands of trustees for charitable purposes. The Royal College of Physicians of London received no inconsiderable sum from this source at the beginning of this century when they built their new house in Pall Mall. He has immortalised his name in the scientific world by the disposal of the large property which he had amassed. There is a book, "Radcliffe's Dispensatory," which was, however, not written by Radcliffe.

The next great physician of the eighteenth century was Sir Hans Sloane, born in 1660, and when he began his career he was living in the same house as Sydenham. After Sloane had taken his degree he set out for Paris and studied anatomy under Duverney and botany under Tournefort; he afterwards proceeded to Montpelier. He accompanied the Duke of Albemarle to Jamaica and remained there for 15 months, until the duke's death. He brought back with him an enormous collection of plants, animals, and natural curiosities—a really most valuable collection which attracted widespread attention. Sloane became President of the Royal Society, succeeding Sir Isaac Newton, and was a great patron of science. He gave to the apothecaries their botanical garden in Chelsea where he had purchased an estate, having amassed a large fortune. Sloane was made a baronet by George I. and one of his daughters married Lord Cadogan and was an ancestress of the present Lord-Lieutenant of Ireland; another daughter married into the Stanley family. Sir Hans Sloane was a great collector of all kinds of things and when he died he left his collection for a nominal sum of £15,000 to the nation and it was that collection which formed the nucleus of the British Museum. Thus it is seen that the medical men of the eighteenth century were great personages and a great credit to the profession.

Richard Mead (1673-1754) was physician to Queen Anne. He was a fellow student of Boerhaave, with whom he corresponded a great deal, and was a great traveller. He was the son of a Nonconformist minister in Stepney and being the son of a Dissenter he had to get his education elsewhere than in an English University. Mead was a Fellow of the Royal Society, 1702, and physician to St. Thomas's Hospital in 1703. One of his earliest writings was a "Mechanical Account of Poisons" which although superseded in the present day was a most creditable performance and showed clearly that the author had no slavish regard for authority but like other great men was searching for facts. His account of snake poisoning is very good; he had the pluck to handle the snakes, to make them bite into vessels, collect the poison, and inject it into animals. Next he made dissections of these creatures and gave excellent figures of the skull, jawbone, muscles, poison glands and ducts, and fangs. He was a man who searched into everything *de novo*, though of course his work was now far behind Sir Joseph Fayrer's on the same subject. We owed several things to Mead and amongst others, as lately pointed out by Dr. Payne, the custom of putting round the abdomen a bandage when he performed paracentesis abdominis, and gradually tightening it to equalise the pressure. It was a very common thing for people to faint during this operation and Mead saw the cause of this and as a result of his perception was the first to apply pressure when tapping for the dropsy. Mead had an experience in tapping which very few physicians of the present day have. In those days, tapping for ovarian dropsy was common and Mead gives an account of a wealthy widow who was tapped 36 times in 37 months. He received large fees for presiding at these rituals and probably no lady of position could be tapped without Mead at the bedside. Mead made a large fortune by hard work and, like his predecessors, was a great collector of books, works of art, and curios; he lived in Bloomsbury-square, and afterwards moved to Great Ormond-street to a house which formerly stood on the site of the present Children's Hospital. The house was a magnificent one, a Queen Anne's mansion with beautiful oak panelling, beautiful balustrades and everything which was picturesque and noble. Mead was a downright "medical swell" and when he went to his country house near Windsor he was driven in a carriage drawn by six horses. In those days medical practice was sometimes mixed up with politics. Dr. Freind, who was a wealthy man and a friend of Mead, was Member of Parliament for Launceston in 1722 and political feeling then running high and Bishop Atterbury of Rochester being imprisoned for Popish tendencies, Freind was suspected of aiding and abetting the bishop and also of being in correspondence with the family of the exiled monarch. Atterbury was committed to the Tower where Freind attended him, and the latter was also confined there by a high-handed act of Sir Robert Walpole on the strength of the suspicions above mentioned. The firmness of Mead in refusing to prescribe for Walpole until his friend was released on bail alone availed Freind—such was a great medical man's power in those days. Freind was a great scholar, writing on classical as well as medical subjects; he produced works on "Hydrocephalus" and "Menstruation" and began his "History of Physick" in the Tower. One of the next men was Dr. Peter Shaw, physician to George II. and George III.; Dr. Richard Warren was his son-in-law. Warren was a deservedly successful physician, making £9000 a year, and left £150,000; he was a cheerful, tactful, and learned man and succeeded Shaw as physician to George III. John Fothergill, a Quaker, was a man notable both for his learning and shrewdness. He had a large practice in the City—and a City practice in the middle of the eighteenth century was a very different thing to what it was now, for in those days the City merchants lived over their shops, so to speak, and thus a City practice was a more reliable one than it was now and Fothergill made £7000 a year. Fothergill was a philanthropist, giving to every charitable thing he was able; he did untold kindnesses for his poorer patients. His great hobby was botany and he established at his house in Upton, near Stratford, a great garden with first-rate greenhouses; he imported exotic plants and welcomed any scientific men to his garden, which was acquired by W. Hunter at his death. Fothergill was succeeded by John Lettsom, also a Quaker. Like Fothergill, too, he was a man of very great charity and one of his works was the establishment of the Sea Bathing Hospital at Margate. William Babington began his life as apothecary to Guy's Hospital, but he soon got into a huge practice, being a very popular man. His monument with full-length figure is to be seen in St. Paul's Cathedral. The last great physician of the eighteenth century was Sir Henry Halford, a man whose social position and power equalled that of Mead. He was the son of Dr. James Vaughan of Leicester, but exchanged the name of Vaughan for that of Halford on becoming a baronet in 1809. His father was not a wealthy man but what money he had he invested in his children's education; he sent his five sons to Rugby and to either Oxford or Cambridge. Henry went to Christ Church and became President of the Royal College of Physicians of London. Halford was the connecting link between the medical men of the eighteenth and nineteenth centuries respectively; he was mainly instrumental in building the new College in Pall Mall.

Dr. Poore, having referred to the great personages, then

considered the great medical advances of the eighteenth century, of which he mentioned the three most important. Undoubtedly the greatest was the combat with scurvy since scurvy was the scourge of the navy and mercantile marine. Scurvy, he thought, was far more common than was generally supposed; apart from well-marked scurvy many people had the scorbutic taint. In the sixteenth and seventeenth centuries the poor got very little fresh meat and vegetables, living principally on salted meat and fish; cabbage gardens were then by no means common and the potato had not been generally introduced into the natural diet. In 1780 the potato came into the dietary of St. Bartholomew's Hospital. Dr. Church, the present President of the Royal College of Physicians of London, was of opinion that the constant use of cow-dung in the pharmacopœias of former times was possibly due to the fact that grass cooked in this rather unsavoury way was good for the scurvy; there must be something in that for it was hardly conceivable that people would have taken such stuff if they had not got some real benefit. When Commodore Anson made a tour of the world in 1740 he lost nearly the whole of his crew from scurvy; when Cook went round the world in 1769 not a man was lost from this disease, so that somewhere between 1740 and 1780 scurvy was got rid of. Sweet-wort (now extract of malt) was said to have prevented scurvy among Cook's crew; and Sir John Pringle—a great hygienist who had control over the army and was President of the Royal Society—in presenting Cook with the Copley medal complimented him on not having his crew decimated by scurvy. Sir Gilbert Blane, physician to the fleet, ordained that lime-juice should be used habitually and freely as a regular article of diet among sailors, and since this introduction the disease had almost disappeared. We see then that we got rid of scurvy by our advance in agriculture and horticulture.

The detection of the cause of lead poisoning by Sir George Baker was a great medical advance. "Endemial colic" was of frequent occurrence in all parts of the world—in Spain, in France (Poitou), in Devonshire (where it had the name of "Devonshire colic"), and in Central America (where its local name was "dry belly-ache"). All these diseases, as a consequence of Baker's discovery were found to be due to the presence of lead in the blood and his paper, read at the Royal College of Physicians in 1767, was a masterpiece of reasoning and observation; Baker was assisted by Dr. Saunders, a chemist of great repute, in the chemical part of his investigations.

The fight with small-pox was another event which marked the medical progress of the eighteenth century; small-pox was then a veritable scourge. In 1717 Lady Mary Wortley Montagu, who accompanied her husband to Adrianople, relates that the Turks mitigated the attacks by the process of inoculation; she had her son inoculated. The practice was tried on some criminals in Newgate who were promised that they should go scot free if they recovered, which fortunately for themselves they did. After this it received the sanction of the profession in this country and inoculation became general, but experience proved that while the mortality from the inoculated disease was low the practice of inoculation favoured the spread of the disease.

In the latter half of the eighteenth century Edward Jenner, who was apprenticed at Sodbury in Gloucestershire, was struck by the answer of a woman who said that she could not have small-pox because she had had cow-pox; he never forgot this and made every inquiry possible relating to this belief, and after working for over 20 years disclosed his views on the subject. He performed the first vaccination of a boy in 1796. Jenner made a discovery of which we do not yet know the full meaning and which will be found to have a more general application than the discoverer himself could have thought of at the time. Many people made a great deal of money out of small-pox, amongst whom was Thomas Dimsdale, who published "The Present Method of Inoculating for the Small-pox," which ran through seven editions in three years. The Empress Catharine of Russia sent for Dimsdale to inoculate her and some of her family for which he received the very moderate fee of £12,000 and £500 per annum and was made a Baron; small-pox then was in some respects a very useful thing! Coming to the surgeons, Dr. Poore mentioned Cheselden, a great anatomist, who wrote a work on the bones, Percival Pott, and John Hunter. Hunter was one of the greatest geniuses who ever lived and a born naturalist. One had only to read the Lives of Hunter and Harvey to see that their minds were hardly ever detached from the object of their lives. Hunter cared for nothing except the dissection of animals and the collection of morbid specimens, and these characteristics account for the great amount of knowledge which he accumulated. Dr. Poore advised all present to read Mr. Stephen Paget's "Life of John Hunter," which was a delightful little book. It brought to one's own mind John Hunter in a most remarkable way. A lady, in complimenting Mr. Paget on the book, said of Hunter: "But what a beast he was!" Some points in Hunter's character one would rather leave out—i.e., his quarrels with his brother William and other colleagues. It must also not be forgotten that Jenner was his pupil and Jenner held Hunter in the very highest admiration and always alluded to him as "that dear man." It is not too much to say that Jenner had a genuine love for Hunter, and this feeling evinced by one man of eminence for another stands greatly to the credit of Hunter. Medicine has been the benefactor of many other sciences, and amongst the medical men who have been great scientists Dr. Poore mentioned Dr. Gilbert, physician to Queen Elizabeth, the parent of magnetism; Woodward, parent in this country of geology; Grew and Pothergill, Sloane and W. Hunter, great botanical collectors, Saunders and Wollaston, great chemists; Sir William Watson, the electrician; James Young, propounder of the undulatory theory of light; and Wells, the physicist who distinguished himself by his researches on dew. Dr. Poore concluded his address by referring to the literary medical men of the eighteenth century, who were a remarkable body. Oliver Goldsmith, of course, came first as one of the greatest writers of English this country had ever produced. Garth wrote satirical poems which were thought very much of at the time but if read now would appear dull work because the local colouring had all gone. John Arbuthnot, a mathematician and physician, was a friend of Dr. Johnson, of Pope, and of Swift, on whose writings it was difficult to say accurately what influence he had. He was probably about the only man Swift admired. Arbuthnot was said to have inspired a great deal of "Gulliver's Travels" and was also concerned with Pope and Swift in the production of the "Memoirs of Martinus Scriblerus," a book of wit but somewhat coarse. Smollett, a great wit and a great novelist, and Dr. John Aikin, brother of Mrs. Barbauld, whose "Evenings at Home" had been translated into every European language, closed the list. "In conclusion, gentlemen," said Dr. Poore, "I repeat what I said at the beginning, that fame is very short-lived and that many of those admired to-day will probably be forgotten 50 years hence. I began with Tennyson; I will end with Dr. Watts:

"'Time, like an ever-rolling stream,
Bears all its sons away;
They fly forgotten as a dream
Dies at the opening day.'"

ON "CROSSED" APHASIA

AND THE FACTORS WHICH GO TO DETERMINE WHETHER THE "LEADING" OR "DRIVING" SPEECH-CENTRES SHALL BE LOCATED IN THE LEFT OR IN THE RIGHT HEMISPHERE OF THE BRAIN,

WITH NOTES OF A CASE OF "CROSSED" APHASIA (APHASIA WITH RIGHT-SIDED HEMIPLEGIA) IN A LEFT-HANDED MAN.

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IN perfectly healthy right-handed persons who do not inherit a tendency to left-handedness[1] the "driving" or "leading" speech-centres are (with perhaps rare exceptions, but I know of no recorded cases which definitely prove this) situated in the left hemisphere of the brain; and *vice versâ*, in left-handed persons the "leading" or "driving" speech-centres are, so far as we know, usually, but probably less constantly, situated in the right hemisphere. Consequently,

[1] My reasons for introducing the qualifications "perfectly healthy and "who do not inherit a tendency to left-handedness" will be apparent after the reader has perused the paper.

when aphasia (I refer to marked and persistent and not merely temporary aphasia) occurs in a left-handed person the lesion is usually situated in the right hemisphere of the brain and the hemiplegia (if there is hemiplegia) is usually left-sided. But in some cases, which so far as we at present know are quite exceptional, an attack of right-sided hemiplegia in a left-handed person is attended with aphasia—in other words, in exceptional cases the "leading" or "driving" speech-centres are in left-handed persons, situated in the left hemisphere of the brain. The following is an illustration in point.

A man, aged 36 years, for the past year a barman, formerly a pitman, was admitted to the Edinburgh Royal Infirmary on March 9th, 1899, suffering from right-sided hemiplegia and aphasia. The patient was a left-handed man and had been so all his life. He did everything except write with his left hand; he had always written with the right hand, but he could write a little with the left. None of his near relatives or ancestors were known to have been left-handed. He was a twin; his twin-brother was right-handed. The history as to left-handedness both in the patient and his relatives and ancestors had such an important bearing on the case that I both wrote to and interviewed the patient's mother on the subject. She told me that the patient was strongly left-handed from early infancy; in order to teach him to write with his right hand the schoolmaster strapped his left hand to his side; he had never written with his left hand; none of his relatives or ancestors either on the father's or mother's side had so far as was known been left-handed. With regard to his previous history (which was partly obtained from his wife and partly from himself) he never had any illness, so far as he remembers or his wife knows, until the present attack. He had not had syphilis. He had been a steady man. He knew no cause for the present attack. On Nov. 6th, 1898, while straining at stool he was suddenly seized with right sided hemiplegia and aphasia. His wife said that when she went to the water-closet to see why he was remaining so long (10 minutes after he had gone to stool) she found him paralysed on the right side, unable to speak, but not unconscious. Up to the onset of the attack he was in the enjoyment of perfect health and had never suffered from headache, giddiness, vomiting, or any other symptoms suggestive of cerebral disease. For six weeks after the onset he was confined to bed. During this time he appeared to be in a "dazed condition" and slept a great deal, but his wife stated that from the first he seemed to understand what was said to him and to know what he wanted to say. She also thought that after the first six weeks he was able to read, for he not only busied himself with the newspaper every day but on several occasions he directed her attention to paragraphs in the paper which had for him and her a special interest. At the end of six weeks his arm still remained completely paralysed but the right-sided facial paralysis had almost disappeared. He was beginning to move his leg in bed and he could say a few words. Since this date (the end of December, 1898) he has slowly but gradually improved. The family history of the patient was unimportant. He had been married for eight years and had had two children; the first was born at the full time, was alive and well and had always been healthy; the second was born dead at the full time. His wife had not had any miscarriages. The patient's present condition is as follows. He is a well-nourished, healthy-looking man. His height is five feet seven and a half inches and his weight is 12st. 11lb. He looks bright and intelligent. The temperature is normal. There is marked right-sided hemiplegia, the face, arm, and leg all being affected. The paralysis of the face is slight, though still detectable on careful examination. The paralysis of the leg is very marked; he is unable to stand or walk when unassisted, but he can do so if he has the support of an arm on his right side and a stick in his left hand. The paralysis of the arm is still more marked than that of the leg; it is complete in the hand. The right arm is markedly thinner than the left. The tendon reflexes are all exaggerated on the right side (ankle-clonus is present; the knee-jerk, the wrist-jerk, the triceps-jerk, and the jaw-jerk are all markedly exaggerated). On the left side there is no ankle-clonus and the left knee-jerk is normal in degree. The plantar reflex is marked on both sides. On tickling the sole the big toe of the right foot is extended—Babinski's reaction—while the toes of the left foot are flexed. The skin-sensibility to tactile and painful impressions is diminished in the right arm and leg; it is normal on the right side of the face. The sensibility to heat and cold seems equal and normal on the two sides of the body. The special senses are normal. There is no hemianopsia. The optic discs are normal. The heart, aorta, radial arteries, kidneys, and, in fact, all the internal viscera are perfectly normal. With regard to the speech functions, there is very marked motor-vocal aphasia, some word-deafness, considerable word-blindness and agraphia. The condition of the different speech faculties was in more detail as follows. As to the auditory speech-centre the patient seems to understand simple questions which are put to him and usually does simple acts which he is told to do correctly (shuts his eyes, puts out his tongue, holds up his hands, &c.), but he occasionally makes mistakes when told to do such simple things (he once put out his tongue when told to close his eyes, for example) and evidently has considerable difficulty in understanding complicated spoken speech. Consequently there is some word-deafness. As to the motor-vocal speech-centre he is almost completely unable to express himself in spoken speech. He can say his own name, "yes," "no," and a few other simple words, especially numbers; he seems to know what he wants to say, but cannot say it. He cannot, for example, tell me his wife's name or his child's name; he is annoyed at this. During the first three weeks that he was in hospital he never once correctly told me his age, but he knows quite well what his age is (36 years). When, however, he is asked to write his age with his left hand he always does so correctly in figures (36). He is able to indicate correctly (by holding up his fingers) the number of syllables in most words, though he makes some mistakes. On one occasion he indicated that there were two syllables in the words "dog" and "God," but on the same occasion he correctly indicated the number of syllables in the words "papa," "Constantinople," "Sunday," and "hippopotamus." He is unable to repeat the great majority of words which he is asked to say. He often repeats the same word over several times; but there are no special "recurring utterances." Consequently, there is marked motor-vocal aphasia. As to the visual speech-centre, he responds imperfectly to written questions even of a simple kind ("Put out your tongue," "Shut your eyes," "Give me your hand," &c.). It was some time before he could be made to understand that these written questions were requests or commands to do something; and after he was made to understand this he did not always respond correctly in pantomime; for example, in answer to the written request, "Give me your hand," he put his hand straight up in the air; he made out the word "hand" correctly but not the "give me." He can read figures much better than letters and words. He indicates at once, and correctly, by holding up his fingers the written numbers 4, 6, 9, and 7. He can add up a series of simple numbers, but takes time to do so, and often makes mistakes; for example, he made 10, 6, 7, and 5 when placed as an addition sum = 24; when told that it was wrong he after a time made it 28. He does not appear to be able to make out complicated written questions. Prior to his illness he was in the habit of reading the newspaper regularly. Consequently, there is a considerable degree of word-blindness. With regard to the motor writing-centre, he is unable to hold a pencil in his right hand (with which he was taught to write and with which he has only been in the habit of writing). He can write (i.e., express himself in writing), though very imperfectly, with his left hand. Prior to his illness, though he could write quite well he was not in the habit of writing much and he never wrote with his left hand. When asked to write his name, his age (36 years which he cannot utter), and some simple words and numbers such as "dog," 4, 36, 100, he does so correctly with his left hand. But he is unable to write down other simple words; for example, he wrote "cog" when asked to write "cat," "gog" when asked to write "God" (he had immediately before this written the word "dog": the "og" seemed to be running in his mind); when asked to write "one thousand and one" in figures he wrote 1000 and then 100 underneath it; when asked to write "ninety-eight" he wrote 92, &c. He writes with his left hand in the ordinary direction, from left to right (not in mirror writing). His inability to write is not due to any difficulty in forming the letters—i.e., it is not a mere motor or kinæsthetic defect—but it appears to be due to loss of or want of the knowledge of the manner in which the letters should be grouped

to form words—i.e., it appears to be, chiefly at all events, the result of an aphasic defect on the sensory side of the speech mechanism. He cannot, for example, spell such simple words as "cat" and "God" (in writing). Consequently there is marked agraphia; but it is difficult to be sure of the extent of the agraphia since the patient has not been accustomed to write with the left hand.

Remarks.—The case presents several points of interest. The most important and the only one which I shall refer to at any length, is the fact that in this patient, who for everything except writing is left-handed, an attack of right-sided hemiplegia has been attended with marked and persisting aphasia ("crossed" aphasia). But before considering this point it will be necessary to discuss the diagnosis.

Anatomical diagnosis.—There can, I suppose, be little or no doubt (because of the presence of associated right-sided hemiplegia) that the lesion is situated in the left hemisphere of the brain. The only other possible explanation is that the lesion is situated in the right hemisphere (on the side of the hemiplegia) and that the pyramidal tracts do not decussate in the normal way at the top of the spinal cord. But the presence of such an anatomical variation is most improbable, consequently this explanation is infinitely less likely than the one which supposes that in this left-handed man the "leading" speech-centres are situated in the left hemisphere of the brain. I conclude, therefore, that the lesion is in the left hemisphere and that the aphasia is "crossed," in other words, that in this left-handed man the "leading" or "driving" speech-centres are not situated, as they usually are—so far as our present information enables us to judge—in left-handed persons, in the right, but that they are situated in the left hemisphere of the brain. The aphasia is partly motor and partly sensory (there is marked motor-vocal aphasia, some word-deafness, considerable word-blindness, and agraphia), but the motor-vocal aphasia appears to be the chief aphasic defect, and the statement of the patient's wife would seem to show that this has been the case since the early stages of the attack. The fact that there is not only motor-vocal aphasia but some word-deafness and considerable word-blindness proves, I think, conclusively that the lesion is cortical and that it involves the "zone of language"—the motor-vocal speech-centre (Broca's convolution)—and probably also to some extent, and perhaps to a considerable extent, the other speech-centres—auditory and visual—for it must be remembered that five months have elapsed since the occurrence of the lesion and that during this period considerable improvement in the sensory speech defects may have taken place. There is no reason whatever to suppose that the patient's inability to understand complicated spoken speech and written speech is due to a mere defect of intelligence; it is obviously a speech defect—in other words, it is due to word-deafness and word-blindness. Nevertheless, although the aphasia is cortical the patient does respond—though not quite perfectly—to the Proust-Lichtheim test, for he can correctly indicate the number of syllables in such a complicated word as "Constantinople." Although in many cases of aphasia it is hazardous to predict the exact position of the lesion from the clinical phenomena alone, in this particular case it may, I think, for the reasons advanced above, be concluded: (1) that the lesion is situated in the left hemisphere; (2) that the motor side of the speech mechanism is directly implicated (though the sensory speech-centres are probably also involved); and (3) that the lesion is cortical.

Pathological diagnosis.—This does not call for any lengthened discussion. The sudden occurrence of the lesion while straining at stool shows that the lesion was a vascular one. Thrombosis may be excluded, because of the sudden onset and the absence of any previous symptoms indicative of cerebral disturbance or of vascular disease. The lesion was therefore either an embolism of the middle cerebral artery or a cerebral hæmorrhage—but which of these it is difficult or impossible to say. The patient is only 36 years of age; there is no kidney disease and no vascular disease; his wife said that he was not unconscious when she found him 10 minutes after the onset. These facts are opposed to an *intra*-cerebral hæmorrhage and so is the cortical position of the lesion. On the other hand, the sudden occurrence while straining at stool is in favour of hæmorrhage, and especially of an *extra*-cerebral hæmorrhage (but it is most unlikely that a meningeal hæmorrhage would have produced such marked and persistent paralysis and aphasia), and is against embolism, and so is the absence of any cardiac or aortic lesion—i.e., any obvious cause of embolism. I conclude, then, that the lesion was either embolism or hæmorrhage and that the balance of evidence is, on the whole, in favour of the former (embolism).

The explanation of "crossed" aphasia.—And now I come to the point of chief interest in the case—viz., the "crossed" aphasia. The patient is a left-handed man, though he has always written, and only written, with his right hand; for everything else except writing he is left-handed. None of his near relatives or ancestors have been left-handed. He was suddenly seized with right-sided hemiplegia and aphasia the result of a vascular lesion in the left hemisphere. The aphasia is chiefly motor-vocal aphasia (though there is also considerable sensory aphasia) and the lesion is undoubtedly cortical. The severity of the motor-vocal aphasia and its long duration—four months—in a marked degree seem to prove that the destruction of Broca's convolution (the left motor-vocal speech-centre) must have been very complete. How, then, are we to account for the fact that in this left-handed man the "leading" or "driving" speech-centres are situated in the left and not in the right hemisphere of the brain? I will, for the sake of clearness and simplicity of argument, limit my remarks to the motor-vocal speech-centre, leaving out of account the sensory aphasia which was also present.

In discussing this question of "crossed" aphasia it is essential to remember: 1. That the vast majority of mankind use one hand more than the other—i.e., are either right-handed or left-handed. Very few persons are actually ambidextrous; indeed, it is doubtful if any person is ever *literally* ambidextrous—i.e., able to use both hands equally well for every movement and action. Almost every person—probably every person—who at first sight appears to be ambidextrous will on careful examination be found to use one hand in preference to the other in the performance of some movements—i.e., the movements which for him are the most difficult and most unaccustomed. Further, it will generally be found that persons who appear to be ambidextrous are, or were, originally left-handed and that their ambidexterity is due to the fact that they have by practice and use trained the right hand to great dexterity notwithstanding the circumstance that they are, in consequence of special organic aptitude, left-handed. If right-handed persons—even those who are strongly right-handed from birth—were trained to use the left hand (in the same way that left-handed persons are trained to use the right hand) ambidexterity could, of course, be equally produced in them and would be frequently seen in right-handed persons; but, as a matter of fact, they are not so trained, consequently, right-handed persons are very rarely markedly ambidextrous. 2. That the great majority of persons are right-handed. Right-handedness is the rule, left-handedness is the exception, and the exceptions—left-handed people—constitute a minority (according to Hyrtl 2 per cent.) of the whole. Various theories have been advanced to account for this. I do not propose to discuss them in this paper further than to say that, however right-handedness may in the first instance have originated, (*a*) according to some authorities it is the result of acquired habit; and (*b*) according to others it is the result of hereditary influence or special organic aptitude; and that both of the causes may without doubt be effective. Sir Daniel Wilson, after an exhaustive consideration of the whole subject, comes to the conclusion: "That the preferential use of the right hand is natural and instinctive with some persons; that with a smaller number an equally strong impulse is felt prompting to the use of the left hand; but that with the great majority right-handedness is largely the result of education."[2] 3. That the ancestors of the great majority of persons have for generations been right-handed. There is strong evidence to show that from the earliest times of which we have any accurate records on the point right-handedness was the rule and left-handedness was the exception. On this point Sir Daniel Wilson states: "So far then it seems to be proved that not only among cultured and civilised races, but among the barbarous tribes of both hemispheres—in Australia, Polynesia, among the Arctic tribes of our northern hemisphere at the present day, and among the palæolithic men of Europe's post-pliocene times—not only has a habitual preference been manifested for the use of one hand rather than the other but among all alike the same hand has been preferred. Yet, also, it is no less noteworthy that this

[2] Left-handedness, p. 127.

prevailing uniformity of practice has always been accompanied by some very pronounced exceptions. Not only are cases of exceptional facility in the use of both hands of frequent occurrence, but while right-handedness everywhere predominates left-handedness is nowhere unknown."[3] 4. Consequently, (*a*) heredity, (*b*) congenital organic aptitude, and (*c*) actual acquirement (habit, example, social usage, and education) all tend to make the great majority of persons right-handed. It must also be remembered that left-handedness is sometimes hereditary and may run through several generations. In many—probably most—cases, however, in which a person is left-handed the left-handedness, though congenital—i.e., born with the individual and the result of what may be termed organic aptitude—is not, strictly speaking, hereditary. Why some persons whose ancestors were not left-handed should be born with a strong tendency to use the left hand rather than the right we do not know any more than we know why in some (rare) cases the viscera are transposed. Again, the descendants of left-handed ancestors may be right-handed even when the left-handedness has been present in several preceding generations. I take it that in such cases there is (it may be even after several generations of left-handedness) a reversion to the original right-handed condition. 5. It consequently follows that in right-handed persons the left hemisphere and in left-handed persons the right hemisphere is the "leading" or "driving" side (hemisphere) of the brain. I need not discuss the question whether the greater activity or superiority, if the term may be allowed, of the left hemisphere in right-handed persons and of the right hemisphere in left-handed persons is the cause or the consequence of the right or left-handedness. 6. That with rare exceptions the "leading" or "driving" speech-centres are situated in the hemisphere of the brain which is, so far as the movements of the hand are concerned, the "leading" or "driving" side. This is a fundamental proposition founded on the results of clinical and pathological observation which is acknowledged by all authorities. Consequently, in right-handed persons the "leading" or "driving" speech-centres are, with perhaps rare exceptions, situated in the left hemisphere; and in the great majority of left-handed persons the "leading" or "driving" speech-centres are situated in the right hemisphere, and therefore (7) acute and complete destruction of Broca's convolution (the left motor-vocal speech-centre), when it occurs in a right-handed man, will, and does, in the vast majority of cases produce motor-vocal aphasia; while the same lesion when it occurs in a left-handed man will not, and does not, in most cases produce motor-vocal aphasia. *Vice versâ*, acute and complete destruction of the motor-vocal speech-centre in the right hemisphere of the brain when it occurs in a left-handed man will, and does, in most cases produce motor-vocal aphasia; while the same lesion when it occurs in a right-handed man will not, and does not, in the vast majority of cases produce motor-vocal aphasia. I mean, of course, marked and persisting, and not merely temporary, motor-vocal aphasia.[4]

Exceptions to these statements occasionally occur. I term such exceptions cases of "crossed" aphasia. In the vast majority of cases of "crossed" aphasia the speech defect is merely temporary and evanescent. It is by no means uncommon for a certain degree of motor-vocal aphasia—obviously the result not merely of an intellectual defect but of a *speech* defect—to attend the onset of an attack of left-sided hemiplegia in a right-handed person, and probably also to attend the onset of an attack of right-sided hemiplegia in a left-handed person (though from the comparative paucity of left-handed people the opportunity of observing such cases rarely occurs). Cases of temporary "crossed" aphasia are, I think, easily enough explained if it be granted, as I think it must be granted—and the occurrence of these cases of temporary "crossed" aphasia is one argument in favour of this view—that the cortical centres in the "non-leading" or "non-driving" hemisphere of the brain—i.e., the right hemisphere in right-handed persons and the left hemisphere in left-handed persons—which correspond to the speech-centres in the "leading" or "driving" hemisphere—i.e., the left hemisphere in right-handed persons and the right hemisphere in left-handed persons—are possessed of some sort or degree of speech function, which is usually, I think, carried on in conjunction with, and in subordination to, the function of the speech-centres in the "leading" or "driving" hemisphere and which probably, I think, varies in degree in different individuals and in accordance with the function of the individual speech-centres (auditory, motor-vocal, and visual). Cases of "crossed" aphasia are, however, occasionally, though very rarely, met with in which the aphasic symptoms are of long duration—i.e., are persistent or permanent. But so far as I know cases of this kind very rarely indeed occur in right-handed persons, indeed I know of no recorded case; so far as I know they almost always occur in left-handed persons. I am speaking of cases in which there is no reason to suppose that the normal development of the speech-centres was interfered with in early life.

The factors which go to determine whether the "leading" or "driving" speech-centres shall be located in the left or in the right hemisphere of the brain seem to me to be chiefly two—viz.: (1) heredity; and (2) congenital aptitude or personal acquirement—i.e., whether the person is right-handed or left-handed; and, speaking generally, I am disposed to think that the latter would, if these were the only factors, be, in most cases at all events, the more potent of the two. For example, in the majority of left-handed persons whose ancestors were right-handed—i.e., who inherit no tendency to left-handedness—the influence of the left-handedness, which tends to locate the "leading" or "driving" speech-centres in the right hemisphere, which because of the left-handedness is in them the "leading" hemisphere so far as the movements of the hand are concerned, will be more potent than the influence of the heredity, which tends to locate the "leading" or "driving" speech-centres in the left hemisphere, which in preceding generations was the "leading" hemisphere both as regards the movements of the hand and also as regards the speech-centres. Hence, if heredity and personal acquirement were the only factors the "leading" or "driving" speech-centres would in the majority of left-handed persons be situated in the right hemisphere. Whether the act of learning to write with the right or the left hand and the practice of the act of writing after the act of writing has been acquired have any influence in locating the "leading" or "driving" speech-centres in one or other—the left or the right—hemisphere of the brain is an interesting question and one which it is perhaps impossible to answer with any degree of certainty. We learn to read and write long after we learn to understand spoken language and to speak, and long after we have become (whether this is the result of heredity, of congenital peculiarity, or of acquired habit) right-handed or left-handed. The fundamental speech-centres, as I term them, or the "primary couple," as Wyllie has termed them, are trained and their functional activity is highly developed long before the accessory speech-centres (the secondary couple) are trained and brought into action. It may therefore, I think, reasonably be supposed that in most persons the location of the fundamental speech-centres (auditory and motor-vocal), as the "*leading*" speech-centres in the left hemisphere, has already been fixed and determined before the associated speech-centres (the visual speech-centre and the motor-writing centre) begin to be called into action. In right-handed persons, in whom the location of the fundamental speech-centres, as "leading" speech-centres, in the left hemisphere has already been determined both by heredity and actual acquirement, the fact that they are taught to write with the right hand will confirm and strengthen this location. But whether in left-handed persons whose ancestors were right-handed—in whom the fundamental speech-centres have been already located as the "leading" centres, in the right hemisphere, by the preponderating influence of actual acquirement or congenital peculiarity over heredity—the fact that they are taught to write with the right hand can upset this (prior) localisation—i.e., can re-transfer the "leading" speech-centres to the right hemisphere—is an interesting question. It is probable, I think, that in some cases it may be able to do so.

It seems to me that in left-handed persons whose ancestors have been right-handed the question whether the "leading" or "driving" speech-centres are located in the right or in the left hemisphere of the brain will—at all events, prior to the time when they are trained to write with the right hand—chiefly depend upon the fact whether the hereditary influence which favours their location in the left hemisphere or the acquired influence—due to the left-handedness—which favours their location in the right hemisphere, is the more potent, and, as I have already stated,

[3] Ibid., p. 115.

[4] For the sake of simplicity I limit my remarks to motor-vocal aphasia, but the same statement may be applied, though not perhaps quite so exactly, to the sensory varieties of aphasia.

I am disposed to think that, in most cases at all events, the latter factor will be the more powerful. But it is not difficult to conceive that in some cases (left-handed persons whose ancestors were right-handed) these two factors—heredity and actual acquirement—will, so far as the location of the speech-centres is concerned, be pretty evenly balanced, and that up to the time that the child begins to learn to read and write the location of the speech-centres as the "leading" speech-centres in the right hemisphere (even granting that the influence of the acquired left-handedness is more potent than the influence of heredity) will not be very firmly fixed. And in such cases it is not, I think, unreasonable to conclude that the introduction of a third factor—viz., the learning to write with the right hand, the most highly specialised movement, it must be remembered, of the hand so far as the speech functions are concerned—may be sufficient to turn the scale and to determine that the "driving" or "leading" speech-centres (the location of which up to this point is not very firmly fixed in the right hemisphere) shall be, finally and firmly, located in the left hemisphere.

Hence in cases of "crossed" aphasia in left-handed persons, with the object of trying to throw further light upon this point, it should always be noted whether the patient has been taught to write with the right or the left hand and whether he has been accustomed to write much or little and whether he is ambidextrous or not. In the particular instance I have recorded the patient was taught to write with his right hand and had never learned to write or been in the habit of writing with his left hand; hence the third factor, which I have suggested as a possible cause of the location of the "leading" speech-centres in the left hemisphere of the brain in left-handed persons, may perhaps in this particular case have come into play and may have finally determined the location of the "leading" speech-centres in the left hemisphere. And in this connexion it is interesting to note that Dickinson's case of "crossed" aphasia in a left-handed man (recorded by Bastian) is in many respects very similar to my own—viz.: right hemiplegia with marked motor aphasia in a left-handed man who was so ambidextrous that although "he was in common phrase left-handed he said he was not to be called so since he used both hands equally well."[5] Further, this view (the theory that the act of learning to write and the practice of the art of writing with the right hand may, in some left-handed persons, determine the location of the "leading" or "driving" speech-centres in the left hemisphere of the brain) seems to be supported by the following case recorded by H. Oppenheim.[6]

A woman, aged 59 years, who had been left-handed since the age of 17 years in consequence of an injury received at that time to the right hand, was admitted to hospital on Sept. 23rd, 1889, and died on Oct. 6th, 1889. For two years before admission to hospital she had suffered from headache. 14 days before admission to hospital aphasic symptoms (complete word-blindness and agraphia, some word-deafness, and paraphasia) gradually developed. During her stay in hospital she became completely hemiplegic and hemianæsthetic on the left side; left-sided bilateral homonymous hemianopsia was found to be present; and optic neuritis developed in the right eye three days before death. On post-mortem examination a large sarcomatous tumour was found in the right hemisphere. It involved the optic thalamus, the lenticular nucleus, the internal capsule, and extended up to the island of Reil and into the white matter of the occipital lobe. There was no lesion, either macroscopic or microscopic, in the left hemisphere.

This case would seem to show that, even at the age of 17 years the "leading" or "driving" speech-centres, in a right-handed person, may—I do not, of course, say that they will always—or will usually, if the patient becomes left-handed in consequence of disuse of the right hand, be transferred from the left to the right hemisphere. At all events this seems to me to be the most reasonable explanation of the facts in this very important and most remarkable case, and it is the explanation which Oppenheim himself suggests.[7] And if this explanation is accepted it certainly lends support to the "third factor" supposition advanced above. I am disposed, therefore, to think that the exceptional cases in which in left-handed persons the "leading" or "driving" speech-centres are situated not as one would expect in the right but in the left hemisphere of the brain may perhaps in most cases be best explained by supposing that in them the influence either of (*a*) heredity or (*b*) of heredity + the third factor which I have suggested—viz., the learning to write and the practice of the art of writing with the right hand—was, so far as the localisation of the "leading" or "driving" speech-centres is concerned, stronger than the influence of the acquired (non-hereditary) left-handedness; that is to say, in such exceptional cases the hereditary localisation of the "leading" or "driving" speech-centres in the left hemisphere (or hereditary + the third factor) have prevented the transference of these (the "leading" or "driving") speech-centres to the right hemisphere. If this supposition is correct one would consequently expect that in most of the exceptional cases in which a left-handed person becomes aphasic and hemiplegic on the right side as the result of a lesion in the left hemisphere of the brain the ancestors of the patient will have been right-handed (i.e., the left-handedness will be acquired and not hereditary), and probably also the patient will have been taught to write and accustomed to write with the right hand, or at all events will be ambidextrous—i.e., accustomed to use the right hand almost as well as the left. And so far as I know this is usually the case. So far as I know no case has been recorded in which "crossed" aphasia was developed in a left-handed person whose ancestors had for several generations been left-handed, though it is probable, I think, for the reason given below, that such cases may occasionally, though probably very rarely, occur. Nor, so far as I know, has any case of "crossed" aphasia in a left-handed person been recorded in which the patient had been taught to write and had only been in the habit of writing with the left hand. *Vice versâ* one would expect that in cases in which "crossed" aphasia of a marked and persistent kind occurred in a right-handed person some of the near relations or ancestors of that person would probably have been left-handed; in other words, that the development of "crossed" aphasia in right-handed persons would be due to the fact that the influence of heredity in keeping the "leading" speech-centres located in the right hemisphere—i.e., the hemisphere which in some of the patient's near relations or ancestors was the "leading" hemisphere—was stronger than the influence of the acquired right-handedness in transferring the "leading" speech-centres to the left hemisphere. But in cases in which some of the near relations or ancestors of a right-handed person had been left-handed the influence of heredity in keeping the "leading" speech-centres located in the right hemisphere would probably be less potent and constant than the influence of heredity in keeping the "leading" speech-centres in the left hemisphere in the case of a left-handed person whose ancestors had been right-handed in consequence of (*a*) the tendency which there is in all abnormal organisms to ultimately revert to the original (normal) condition—i.e., to right-handedness and left-brainedness in the special case which we are considering;[8] and (*b*) that in both cases (since left-handed persons as well as right-handed persons are usually taught to write with the right hand) the "third factor" will tend to locate the "leading" speech-centres in the left hemisphere.

So far as I know, "crossed" aphasia of a marked and persisting kind in a previously healthy[9] right-handed

[5] Aphasia and Other Speech Defects, p. 5...

[6] Archiv für Psychiatrie, vol. xxi., 1890, p. 136.

[7] The only other explanation would be that the "leading" or "driving" speech-centres were in this previously right-handed person originally situated in the right hemisphere, but this explanation seems much less likely and much more difficult to accept.

[8] Though right-handedness is not perhaps, strictly speaking, the original condition, it (right-handedness) may, I think, so far as the speech-centres are concerned, for practical purposes be regarded as the *original* condition. Whether man was right-handed and therefore left-brained before the speech functions and speech faculties became highly differentiated and developed we do not know. But, looking at the long periods of time during which the majority of men have been right-handed and left-brained, left-brainedness may be considered, so far as the localisation of the "leading" speech-centres is concerned, as the usual (normal) and original condition. By the term "left-brained" I merely, of course, mean that the left hemisphere of the brain is the "leading" or "driving" hemisphere.

[9] By a previously healthy right-handed person I mean a right-handed person in whom there was no cerebral lesion in early life to interfere with the normal (usual) development of the speech-centres. It is obvious that if in a right-handed child Broca's convolution were destroyed or arrested in its development, the motor-vocal speech-centre in the opposite (right) hemisphere would become the "leading" motor-vocal speech-centre; and consequently, that if in later life such a person were to become hemiplegic in consequence of a lesion in the right hemisphere, the left-sided hemiplegia in such a right-handed person would be associated with aphasia—i.e., the aphasia would be "crossed." Further, it may perhaps be supposed

person and due to a lesion in the right hemisphere is an extremely rare condition (indeed, I know of no such cases and I will be very much obliged to any of my readers who can refer me to any); but "crossed" aphasia in left-handed persons, though also very rare, seems to be more common, more especially when it is remembered that according to Hyrtyl 96 per cent. of civilised mankind are right-handed and only 2 per cent. left-handed. The rarity of "crossed" aphasia in right-handed persons in comparison with "crossed" aphasia in left-handed persons seems to support the views advanced above.

In a recent issue of THE LANCET[10] Dr. James S. Collier recorded a very interesting and important case in which the left motor-vocal speech-centre (Broca's convolution) was completely destroyed in a right-handed man by a neoplasm and in which there was no aphasia. In his able and interesting comments on the case he suggests that the case proves that, "notwithstanding the immense influence of heredity, right-handedness may in rare cases be associated with leading speech-centres in the right hemisphere." In support of this view he advances the fact that left-handedness does not always transfer the leading speech-centre to the right side of the brain, as exemplified in Dickinson's case,[11] and I may add my own case recorded above.[12] The same explanation was advanced by Dr. Ford Robertson at a meeting of the Edinburgh Pathological Club to account for the absence of aphasia in my case[13] to which Dr. Collier refers in his paper. But the argument does not carry conviction to my mind.

The fact that in left-handed persons whose ancestors were not left-handed—i.e., who were right-handed—a left-sided lesion occasionally though rarely produces aphasia (because, I suggest, either the influence of heredity or the influence of heredity combined with the third factor—learning to write with the right hand—has in such exceptional cases been too strong to allow the "leading" speech-centres to be transferred by the acquired left-handedness to the right hemisphere) does not seem to me to warrant the conclusion that in right-handed persons whose ancestors were right-handed and who have been trained to write and who have been in the habit of writing only with the right hand the "leading" or "driving" speech-centres may be transferred (without, be it noted, any apparent reason or obvious cause, and in opposition both to the influence of heredity and of actual acquirement) to the right hemisphere.

The occurrence of "crossed" aphasia in a left-handed person whose ancestors were right-handed can, I think, in some cases at all events, be explained by the preponderating influence of heredity or by the combined influence of heredity and the act of learning to write with the right hand in keeping the "leading" or "driving" speech-centres located in the left hemisphere. The occurrence of "crossed" aphasia in a right-handed person whose ancestors were left-handed, or who himself, as in Oppenheim's case, though originally right-handed had for some years been left-handed can be explained in the same way—i.e., by heredity or by transference due to the acquired left-handedness. The occurrence of "crossed" aphasia in a left-handed person some of whose ancestors were left-handed (if such cases occur) can also, I think, be probably explained—viz., by reversion to the original condition—i.e., left-brainedness so far as the speech-centres are concerned. But the occurrence of "crossed" aphasia in a right-handed person whose ancestors were right-handed and who had been trained to write with his right hand cannot be explained in this or, so far as I see, in any other way; in cases of this kind the influence of all three factors—viz., (*a*) heredity, (*b*) actual acquirement, and (*c*) learning to write and the act of writing with the right hand—would tend to keep the "leading" speech-centres located in the left hemisphere.

I do not, of course, presume to assert that the "leading" or "driving" speech-centres in a right-handed person whose ancestors have always been right-handed and who has himself been trained to write with the right hand cannot be (are never) located in the right hemisphere. I merely say that so far as I know the evidence which we at present possess is insufficient to support such a view and that even granting that such a transference of the "leading" or "driving" speech-centres may and does occur I see no satisfactory explanation to account for its occurrence. I am speaking, it must be remembered, of cases in which the patient was previously healthy—i.e., of cases in which there is no reason to suppose that there was any lesion in early life (either in the individual himself or in his immediate predecessors—see footnote 9) on the left side of the brain to interfere with the normal development of the speech-centres. Although I believe that in some exceptional cases the speech-centres in the right hemisphere are, in right-handed persons, sufficiently active and educated to immediately take up and independently carry on the speech functions when the "leading" or "driving" speech-centres in the left hemisphere are acutely and completely destroyed, I see no sufficient reasons for doubting that in such cases the speech-centres in the left hemisphere *were, prior to the occurrence of the lesion, the "leading" or "driving" speech-centres.* The fact that Broca's convolution may in a right-handed man be completely destroyed without the production of motor-vocal aphasia, as in the case which Dr. Collier records,[14] and as in my case, to which he refers,[15] does not, I maintain, prove that the "leading" or "driving" speech-centres were in such right-handed persons situated in the right hemisphere. Such cases seem to me merely to show that the motor-vocal speech-centre in the right hemisphere was, in such persons, capable of taking up and independently carrying on the speech functions when the opposite and, as I believe, the previously "leading" or "driving" motor-vocal speech-centre in the left hemisphere was destroyed. I take it for granted (for clinical and pathological evidence seems strongly to support this view) that the speech-centres in one or other hemisphere will always take the lead.

And here I must emphasise the fact that it is of the utmost importance to draw a distinction between the cases, such as my case to which Dr. Collier refers, in which the left motor-vocal speech-centre was suddenly destroyed, and cases, such as Dr. Collier's, in which the motor speech-centre was slowly and gradually destroyed. The explanation which seems to me to afford the best solution of the one (the acute cases), does not, in my opinion (though it may possibly in rare cases be the correct explanation), afford the best solution of the other (the chronic cases). In those cases, such as the one I have recorded, in which the destruction is sudden, the most reasonable explanation seems to me to be that the opposite (right, and, I believe, previously "non-leading") motor-vocal speech-centre was from the first—i.e., immediately after the occurrence of the lesion and without any process of training or substitution—sufficiently educated and active to take up and independently carry on the speech function when the normally "leading" or "driving" speech-centre in the left hemisphere was (acutely and completely) destroyed. This, for the sake of reference and convenience, I will term the "*highly specialised*" theory.[16] In cases such as Dr. Collier's in which the destruction is slowly and gradually produced—i.e., by a neoplasm—the most reasonable explanation seems to me to be that

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that the child of a right-handed person whose motor-vocal speech-centre was in consequence of such a lesion in early life situated in the right hemisphere might inherit this location of the "leading" or "driving" motor-vocal speech-centre; in other words, that he (the child of such a person), though himself perfectly healthy and right-handed, might have as the result of hereditary transmission his "leading" or "driving" motor-vocal speech-centre situated in the right hemisphere of the brain. And consequently if he (such a right-handed person) became hemiplegic on the left side he would at the same time become aphasic. Though I conceive that such an explanation of "crossed" aphasia in a right-handed person is theoretically possible, it is not (on the mere numerical chances and also in consequence of the tendency to "revert" to the original left-brained condition) likely to occur in actual practice.

[10] THE LANCET, March 25th, 1899.

[11] Bastian: Aphasia and other Speech Defects, 1898, p. 90.

[12] Wadham's case, to which Dr. Collier refers, was not a case of "crossed" aphasia. In it a lesion in the right hemisphere produced left hemiplegia and aphasia in a left-handed man who, though originally left-handed, was ambidextrous and able to write, not only with the left, but also with the right hand (though his mother had, prior to the aphasic attack, never seen him write with his right hand).

[13] Brain, 1898, p. 343.

[14] THE LANCET, March 25th, 1899, p. 824.

[15] Brain, 1898, p. 343.

[16] It may, of course, be argued that if one grants that in a right-handed person whose ancestors were right-handed the functional activity of the speech-centres in the right (non-leading) hemisphere may in rare and quite exceptional instances be so great as to enable them to take up and independently carry on the speech function more or less satisfactorily, but never, so far as I know, quite perfectly, immediately after the leading speech-centres in the left hemisphere are suddenly and acutely destroyed, why not go further and grant that they—the speech-centres in the right hemisphere of a right-handed man—may in rare and exceptional cases be the "leading" centres. I admit that it is impossible to disprove this possibility, but I submit that analogy and the results of clinical and pathological experience seem to point the other way.

pari passu with the destruction of the "leading" or "driving" motor-vocal speech-centre in the left hemisphere, the corresponding and hitherto "non-leading" motor-vocal centre in the right hemisphere becomes educated and trained, so that even if the destruction is complete it is able to independently carry on the function of the "leading" speech-centre in the left hemisphere when that "leading" speech-centre is destroyed. This I term the "*substitution or compensation*" theory.

Substitution and compensation are probably, I think, more easily and more perfectly established in the case of slow and gradual than in the case of acute destruction of a speech-centre, granting of course that the time element (the period allowed for substitution and compensation) is the same in the two cases. What I mean to say is that supposing a tumour completely but slowly and gradually destroys the motor-vocal speech-centre in the course of six months the compensation (motor speech function) will at the end of that time be more perfect than in a case in which the motor-vocal speech-centre was suddenly and completely destroyed and in which six months (the same time) has been allowed for the process of compensation and substitution to take place. My reasons are that in the case of acute destruction (1) the cerebral speech mechanism as a whole (the sensory speech-centres as well as the motor speech-centre) is usually, in some degree at all events, thrown out of gear; and (2) irritative and inhibitory disturbances are apt to be produced in the sensory speech-centres, more especially if the lesion is, as it often is, at its commencement, irritative in character. Whereas, in the case of slow and gradual destruction of the motor-vocal speech-centre, the sensory speech-centres are not thrown out of gear and are not so apt to be disturbed by irritation or inhibition, since the lesion—usually a glioma or a glio-sarcoma—is not usually irritative in character. Hence in the case of slow and gradual destruction of the left motor-vocal speech-centre, the sensory speech-centres can, from the very commencement of the destruction and during the whole of the period which is allowed for substitution and compensation, play upon and educate the right motor-vocal speech-centre in a more natural and normal (undisturbed) manner. And if the destruction of the "leading" motor-vocal speech-centre in the left hemisphere is slowly and gradually established I see no reason to suppose that any aphasic symptoms will necessarily be produced during the process of its destruction—i.e., during this period of substitution and training.

It may, of course, happen (though this is, I fancy, very rare) that before the tumour began to develop the motor-vocal speech-centre in the right hemisphere was exceptionally active. In short, the non-occurrence of aphasia in the chronic cases (such as Dr. Collier's case) may perhaps in rare instances be due to the same reason which I have advanced to explain the absence of aphasia in the acute cases. But in the nature of things it would be impossible to prove this—i.e., to show that recovery was not the result of compensation and substitution. But this is, I think, a much less probable explanation than that which the "substitution or compensation" theory affords. We know that substitution and compensation do constantly occur. Hence in those cases in which there is sufficient time for the development of substitution and compensation it is only reasonable to accept the "substitution and compensation" theory as a sufficient explanation rather than to have recourse to the "highly specialised" theory, which is much more difficult to accept, but which notwithstanding the difficulty of accepting it seems to me to be the only reasonable explanation in those cases, in which the destruction is acute, since in the acute cases there is no time for substitution and compensation to occur. Dr. Collier's reason for rejecting the substitution theory in the case which he has recorded is that "it is inconceivable that the glosso-kinæsthetic function could have been taken up by the right third frontal convolution *pari passu* with the devolution of the left third frontal convolution owing to the presence of a slowly growing neoplasm without some speech defect being at any time noticeable." With this opinion I cannot agree. If an ordinary motor-centre—the cortical centre for the hand, for example—can be completely destroyed by a neoplasm without the production of any paralysis—in other words, if in the case of the ordinary motor-centres substitution and compensation can occur—surely they may also occur in the case of the motor-vocal speech-centre, the cortical representation of which is at least as bilateral—personally I am disposed to think more bilateral—than the cortical representation of the hand. Now, cases in which the motor-centre for the hand is completely destroyed without any paralysis being developed do undoubtedly occur. I have myself met with two cases of this kind (Cases 1 and 2 following). The same thing also occurs in the case of the speech-centres. Dr. Collier's case is, I maintain, an excellent illustration in point, and it is not singular. I have met with two cases of the same kind (Cases 2 and 3 following); two cases in which in right-handed persons whose ancestors were not left-handed the left motor-vocal speech-centre was completely destroyed by a neoplasm and in which there was no motor-vocal aphasia.

These cases are reported in the last number of *Brain* (in my series of fatal cases of intracranial tumours). The headings of the cases are as follows:—Case 1 (Case 7 in the series).—A large sarcoma springing from the dura, causing extensive atrophy and destruction of the right ascending frontal and ascending parietal convolutions, the inferior and middle frontal convolutions, the outer half of the island of Reil, and the anterior end of the temporo-sphenoidal lobe; no paralysis.—Case 2 (Case 9 in the series).—Large glioma and cyst in the left hemisphere, causing complete destruction of the greater part of the left ascending frontal and ascending parietal convolutions and their subjacent white matter, the posterior end of the third left frontal convolution, and the greater part of the white matter of the left frontal lobe. No motor paralysis till four days before death; no aphasia.—Case 3 (Case 10 in the series).—Enormous gliomatous tumour involving and destroying the greater part of the left frontal and temporo-sphenoidal lobes, and a large part of the left occipital lobe; no aphasia.

Dr. Ford Robertson has also given me the reference to another case of exactly the same kind—viz., complete destruction of the motor-vocal speech-centre in the left hemisphere by a tumour without the production of aphasia. The case is reported by Giulio Levi, who, in commenting on the case, refers to Oppenheim's case (abstracted above) and advances the same theory which Dr. Collier has advanced to account for the absence of aphasia.[17]

I maintain, then, that the non-occurrence of motor aphasia in cases in which Broca's convolution is slowly and gradually destroyed can be quite satisfactorily accounted for by the "substitution-compensation" theory, and that, so far as I know, no sufficient grounds have as yet been advanced to support the view that in right-handed persons whose ancestors were right-handed the "leading" or "driving" motor-vocal speech-centre may be situated in the right hemisphere of the brain. Though, as I have already stated, I am not, of course, prepared to say that this cannot and does not occur.

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THE RATIONAL TREATMENT OF CONSUMPTION.[1]

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THE following necessarily brief observations which at the request of the distinguished Vice-President I have the honour to bring before this great Congress form a purely clinical contribution to the therapeutics of pulmonary tuberculosis. They are derived from the comparative study, extending over a period of nearly 24 years, of some 10,000 carefully recorded cases, some in private practice, but for the most part in the Royal National Hospital for Consumption and Diseases of the Chest at Ventnor. Many of the patients have been under continuous observation for several years and others have presented themselves at varying intervals, thus affording opportunity for recognising changes in the physical signs and verifying progress or the reverse. The

[17] Rivista di Patologia Nervosa e Mentale, vol. ii., fasc. 2 (February, 1897, p. 72).

[1] A paper read at the International Congress on Tuberculosis at Berlin, May 26th, 1899.

general principles of treatment to be discussed are those carried out at that hospital by myself and colleagues, but for the special methods detailed I alone am responsible.

The recognition of the tubercle bacillus as the specific infectious element and the researches into its natural history associated for all time with the name of Robert Koch first permitted the foundation of a rational system of treatment of pulmonary tuberculosis on the basis of a sufficient and determined pathology, and a direction and precision were given to the therapeutics of tuberculosis where previously all had been speculative and empirical. It is impossible to treat pulmonary tuberculosis on scientific lines without having constant regard to its pathogeny, to the sequence of the different stages of its evolution, and to the various circumstances by which they are conditioned, and the careful recognition of the relations of the objective and subjective symptoms to the various and successive pathological processes in which they have their origin and of which they faithfully reflect the progress and intensity and also to the changes going on in the affected organs. It is from the indications thus derived that a rational treatment must be based. We know for certain that the disease is not only amenable to treatment, but that it is, even in its completed stage, capable also of self arrest and cure, indeed without the consciousness of the patient. Such a result must necessarily be attributed to changes occurring spontaneously both in the constitutional and local conditions—a return to the *status quo ante*—which are inimical to, and incompatible with, the infective energy, if not indeed with the survival of the tubercle bacillus. To recognise, and if possible to imitate, the methods and to reinforce the influences by which nature accomplishes this result constitute the *rationale* of treatment.

Pulmonary tuberculosis presents itself in two distinct stages: (1) the acute or pyrexial and (2) the chronic. The former, which precedes the latter, has much the graver significance and is that which makes by far the heaviest demands on our knowledge and therapeutic resources. It usually passes into the second or may return again and again in the course of the latter, indicating a recurrence of destructive activity.

ACUTE OR PYREXIAL PHTHISIS.

This is a specifically infective fever. It is not determinate in evolution and does not tend to resolution but rather to dissolution or to chronicity. This pyrexia is pathologically characteristic and significant. It is from the beginning adynamic in type, reflecting the constitutional asthenia, and therefore all depressants must be avoided in its treatment. The febrile movement is somewhat irregular and composite in character, but two stages can be easily distinguished, sometimes, indeed, alternating and passing gradually into one another. In the earlier or infective stage the thermometric range is pneumonic in type and corresponds to the varying conditions in the lung of irritation, infiltration, and consolidation. It is often accompanied more or less by hæmoptysis. This early pyrexial stage may also present itself as an intercurrent phenomenon. Occasionally the sudden inflammatory extension of an already developed tuberculous area may be thus indicated in the character of expectoration in addition to thermometric record. It is in this acute stage of the disease that the various forms of local counter-irritation are indicated, such as repeated small blisters when there is intercostal tenderness on pressure and actual cautery when the expectoration is blood-stained or pneumonic in character, and preparation of iodine may also be used externally where large areas of pleural tenderness call for relief. This acute stage may end in complete resolution and there is recovery without material damage to the pulmonary tissues. More frequently (and this is often unrecognised) it passes into the second stage of acute pulmonary tuberculosis which is characterised by an extreme diurnal range of temperature, the maximum being reached almost always in the evening. This has all the characters of septic pyrexia; it is produced by the absorption of the necrotic materials resulting from the toxic effect of the progressing bacillary infection. The febrile movement is essentially one of collapse and reaction, the extent of which is gauged by the extent of the disturbance of thermometric equilibrium. The low morning temperature which is characteristic of this febrile stage is usually accompanied by a feeling of chilliness, especially down the spine, approaching the character of rigors, while the high evening temperature defervesces in profuse colliquative perspiration. It so strongly resembles in these marked features the malarial types of fever, especially the quotidian type, that it even suggests the possibility that it corresponds to, if indeed it is not caused by, the daily maturation and shedding of broods of bacillary spawn or germs. Our knowledge of the embryonic or the prebacillary stage of the adult bacilli and their mode of reproduction is still defective. Its further investigation might throw much-needed light on this point. Resolution in this stage is indicated by the restoration of the thermometric equilibrium and by the cessation of the objective symptoms. On the other hand, the process of disintegration may become complete and the third stage, or that of excavation, may be attained. In the light of these considerations it is evident that the fever of tuberculosis calls for our earliest and most potent therapeutic methods, for not only is each pyrexial wave produced at the cost of a corresponding amount of lung tissue, but the already seriously debilitated system is still further devitalised by the attendant sepsis and by the organic demands of the abnormally high temperature.

It is evident from what has been already said that we have to deal with two distinct but related and often intercurrent phases of phthisis, the acute and the chronic, each of which calls for its appropriate treatment. The more we recognise that in tuberculosis we have to deal with a typical form of parasitism the more clearly are the principles of its therapeusis indicated to the physician. It is this mode of regarding the disease that explains the value of those so-called hygienic methods which have, very properly, of recent years been more and more recognised in its treatment. Unfortunately this appreciation has been carried too far and there is a tendency to neglect or even to exclude completely other not less valuable medical resources at our disposal. To dispense with these therapeutic weapons is like a man combating a relentless enemy with his fists only while potent arms of precision lie neglected at his side.

I have endeavoured in the above observations to state the indications and to formulate the principles on which a rational treatment of consumption should be based and I shall now proceed to consider the therapeutic methods at our disposal under the three heads of (1) hygiene or general treatment; (2) regimen or dietetics; and (3) medical treatment, including the symptomatic and special treatment. We have next to consider how these remedial measures are to be employed in the treatment of the two phases in which the disease is presented.

Hygiene or general treatment.—In acute pulmonary tuberculosis this covers the general management of the case. It concerns the personal conduct of the patient and his immediate environment with its temperature, the amount of exposure to fresh air and sunshine, and the amount of exercise permitted to him, and, lastly, deals with his diet. The principal conditions of this treatment are to be considered under the following heads: (*a*) Rest—absolute repose if possible of body and mind, in the first place. Nothing tends so much either in health or disease to disturb the thermometric equilibrium as either emotional or physical disturbances. In extreme cases it may even be necessary to insist upon the continuous maintenance of the horizontal posture—not necessarily in bed—for a considerable length of time. (*b*) Temperature of the air is more important as regards its equability than in relation to its range which should not be allowed to fall much above or below 55° F. I am more and more inclined to keep up the temperature to the comfort of the patient by additional light coverings, such as ventilated eiderdown bed-quilts, than by raising the temperature of the apartment. If these conditions, with due precautions, can be accomplished in the open air so much the better. If the patient is confined to a room the room should be large, well ventilated, and freely exposed to air and sunshine with the windows and, if possible, the doors open day and night and with the bed standing well out from the walls. (*c*) Conversation, especially on exciting or depressing topics, should be deprecated, but the patient should be encouraged to occupy his mind outside of himself, so to speak, by the perusal of light and cheerful literature. We should bear in mind the different mental resources of the sick, and that those who are less cultivated having fewer mental resources to fall back upon are apt to brood and despond. (*d*) The general bath should of course be

prohibited, but if possible the whole body should be sponged over night and morning by the nurse with eau-de-cologne or spirits of wine and hot water, or toilet vinegar. It not only comforts and refreshens greatly but it has a markedly favourable influence on the temperature.

Regimen or dietetics.—Diet, including stimulants, plays a most important part in the treatment of phthisical pyrexia. A large meal of any kind or red meat at any time should not be permitted. Food should be given in small quantities at regular intervals—say, every two hours during the day and every three hours during the night. It should be varied as much as possible both in materials and cooking according to individual or national taste. It should consist of fish (shellfish in the early part of the day), poultry, white game, pigeons, sweetbreads, eggs, light soups, milk and egg puddings, rice, bread-sauce (instead of potatoes), and of vegetables, which should be taken sparingly, but ripe fruits, especially strawberries, may be taken freely but always early in the day. These materials should be so arranged that the more substantial of them should be given in the form of meals at regular intervals alternately with the lighter forms, which should be taken as refreshments in the intervals. Milk *ad libitum* may alternate or be taken with each more substantial repast if the capacity and taste of the patient permit it. If the digestion is weak, predigested foods or peptonised meat extracts may be given. Stimulants should be used with extreme reserve. If the appetite is poor, and the strength and vitality are low, a tablespoonful of old cognac beaten up with a fresh egg may be given at intervals during the day, according to the demands of the case, or two or three teaspoonfuls of matured whisky in each ration of milk. A glass of dry champagne may be allowed twice a day with a meat meal if the mouth is dry and the appetite is poor. All stimulants should be spread out as much as possible over the day, and given as early as possible before the evening rise of temperature begins. Malt liquors and all red wines are more or less incompatible with a diet into which milk largely enters. They should only be given under very exceptional conditions, such as intolerance of other forms of stimulation, the presence of marked anæmia, or inability to take solid nourishment without them. Lemonade taken with red wines seems to make them lighter, more palatable, and more digestible.

Medical treatment.—This may be distinguished as follows: (1) general—that is, ordinary remedies directed to restore or maintain the general health; (2) sympathetic remedies; and (3) special or specific remedies. 1. General remedies.—Drugs should never be employed in the treatment of disease except under the clearest indications, and this is especially true in phthisis where the stomach should as much as possible be undisturbed and its powers be reserved for the imperative work of nutrition. It is, however, of the utmost importance that it should be in a condition to discharge its functions efficiently. If the tongue is coated minute (one twenty-fourth of a grain) repeated doses of calomel every 10 minutes until one-third of a grain has been taken may be given every forenoon, followed by salicylate of soda in 10-grain doses with tincture of nux vomica and gentian mixture twice or thrice a day, and if there are hepatic complications with or without constipation compound tincture of rhubarb may be added in appropriate doses. If this does not succeed chloride of ammonium in 20-grain doses may be substituted for the salicylate. Where the tongue is epitheliated or irritable and there is nausea preparations of bismuth given in La Bourboule water are the appropriate remedies. If there is anorexia and the tongue is clean small doses of solution of strychnia, dilute hydrochloric acid, and quinine, with tincture of orange, may be given, the digestive reaction being studied as to whether it is acid or alkaline. 2. Symptomatic remedies.—Certain symptoms of phthisis, such as hæmoptysis, colliquative perspiration, and cough, are often so serious and violent in themselves, apart from the morbid processes of whose nature and intensity they are the result and measure, that unless controlled they not only interfere with the comfort of the patient and the tendency to resolution but, especially in the case of hæmoptysis, often prove rapidly and suddenly fatal. The only symptom which I shall permit myself to speak of in this connexion is that of cough which is often so distressing and so injurious. To a certain extent this is physiological—nature's method of expelling the products of diseased action from the lungs. One of the best and simplest ways to enable it to discharge the function efficiently and with a minimum of disturbance is to use the respirator-inhaler which I introduced in 1876,[2] and which I have continued to use up to the present. Charged with a few drops of mixture of chloroform as one part and of guaiacol as three parts, inspired as deeply as possible through the mouth and respired through the nose, and used as continuously as can be tolerated, it is most efficacious in facilitating the expectoration and reducing its amount. It accomplishes the former by increasing the depth, energy, and fulness of the act of respiration, and the latter by its direct antiseptic action. In the fœtid expectoration of basic excavations with narrow opening of discharge into the bronchus, and also in bronchiectasis, this method especially recommends itself. 3. Special or specific remedies.—Cod-liver oil and malt extracts are simply special foods directed to supplement nutrition and do not properly figure in this category. Special or specific remedies are, strictly speaking, those which, recognising the rôle of the specific micro-organism of tuberculosis, are directed to its extinction. Tuberculin is the only one which has yet established any distinct claims to be so considered, and I shall refer to its value subsequently. There are, however, two remedies which have in recent years deservedly come into favour in the treatment of phthisis—viz., creasote and its distillate guaiacol and their carbonates. Of these guaiacol is the one which I have employed almost exclusively for some years. I have already published my reasons for this preference and described[3] my experience with this remedy used hypodermically in acute pulmonary tuberculosis. In my hands it has given better and more certain results than any other remedy which I have employed in reducing temperature and that without any violent perspiration or reaction of any kind. This result I ensure by giving five minims of solution of strychnia combined in each dose with from five to 15 minims or more of pure guaiacol. I have the temperature taken at intervals, according to the intensity of the fever, of from three to six hours and give the injection daily or even twice a day if possible before it begins to rise. If the thermometer registers a subnormal point I give from five to 15 grains of sulphate of quinine. This drug is not so much a febrifuge as an anti-periodic. It is not so potent—indeed, it is often contra-indicated—during the hot stage of malarial fever, but it is most efficacious in the intervals in anticipating the return of the febrile stage. In acute phthisis it seems to prevent or moderate the reactionary rise of temperature from the minimum. Guaiacol, given hypodermically in this manner, is by far the most certain antipyretic with which I am acquainted. I cannot understand how in the treatment of acute tuberculosis the administration of guaiacol, and still more of that most repugnant and otherwise therapeutically objectionable drug creasote, by the mouth should be so persisted in when it so frequently irritates the mucous membrane and disturbs the functions of the stomach and bowels and again when such large doses are necessary to produce any effect. When the hypodermic method has reduced the pyrexia I suspend it for a time or permanently and substitute from five to 10 minims of guaiacol, sometimes adding, when markedly strumous indications are present, from five to 15 minims of tincture of iodine in cod-liver oil three times a day, or where that combination is not tolerated I give the guaiacol either alone or with pure iodine in capsules. When, as occasionally happens, the temperature does not quickly respond to guaiacol injections alone I give simultaneously each time that the thermometer registers above normal 15 grains of salicylate of soda combined with five grains of antifibrin or phenacetin or 10 grains of antipyrin. If there is cyanosis and the pulse otherwise indicates cardiac debility I add five grains of citrate of caffein. These combinations are best administered in cachets. I have seen great help obtained in cases of high pyrexia with great debility by a diet almost entirely composed of milk with 3 drachms of whisky being given every two or three hours regularly for some days. It is not upon the temperature alone that guaiacol acts so efficaciously when it is used in this manner. It seems also to act directly and powerfully upon the pulmonary lesion itself, especially in reducing the expectoration and with it the cough and in most cases it influences very favourably the general condition, patients declaring that "they feel better in themselves." I use guaiacol hypodermically also in nearly all chronic cases when the destruction of lung is extensive and the amount of expectoration is large and does not lessen

[2] THE LANCET, Oct. 5th, 1877; Brit. Med. Jour., May 26th, 1881.
[3] Brit. Med. Jour., March 7th, 1896.

where the guaiacol has been given internally. I have found the carbonate of guaiacol very useful in cases complicated by diarrhœa and other irritable conditions of the bowels. The curative action of guaiacol applied locally in external tuberculous lesions such as ulcerations in both skin and mucous membranes is remarkable and in such cases, of course, is less a matter of inference than of fact. Sir Philip Smyly, the distinguished Dublin physician, who first used guaiacol hypodermically at my instance, has on several occasions written to me describing his great success with this method of using guaiacol in cases both of surgical and of medical tuberculosis.

I may here refer to the endeavour to overcome such an acute and rapidly destructive phase of disease by what may appropriately be termed the expectant treatment as carried out more or less completely at some of the sanatoria for tuberculous patients where it is professed that hygienic measures are alone employed. Such an exclusive method is to be deprecated in the strongest terms. It is a distinctly retrograde step in therapeutics. To keep the patient in the acute stage of tuberculosis continually in bed for many months waiting for the pyrexia to subside and trusting alone to rest, fresh air, and a general diet urged to more than repletion three or more times a day is unscientific, extravagant, and wasteful. It is besides totally unnecessary and inflicts an amount of mental and bodily suffering on the unfortunate patient which only those can realise who have passed through the ordeal.

CHRONIC PULMONARY TUBERCULOSIS.

The treatment of this phase of the disease need not detain us long. When the thermometric record has settled permanently at normal the acute stage has passed and we have now to deal with the chronic stage of the disease. The special remedies which have hitherto been employed to supplement or reinforce the hygienic means in the accomplishment of this result are no longer necessary. The treatment now indicated is mainly disciplinary and dietetic and the environment now takes a more important part in the process of convalescence. The tendency of the arrested morbid process is towards repair and recovery and now purely hygienic treatment assumes its proper rôle. To be efficacious this must be carried out systematically and in properly located and appropriately constructed sanatoria under efficient medical control and be carefully adapted to the idiosyncrasies and personal requirements of each patient individually. The great importance of this general hygienic treatment or—as it has been more correctly called—physical and dietetic treatment has met with tardy appreciation by the profession. Although the importance of general hygienic methods have long been recognised their full value has only been demonstrated in hospitals or sanatoria where they have been systematically carried out under proper conditions. The hospital with which I have been so long connected was originally constructed and its site was chosen with the purpose of making hygienic methods a leading feature of treatment. Designed on the pavilion principle each addition to the series has been constructed so as to meet the conditions which the successive advances in our knowledge have demanded. The time at my disposal on this occasion will not permit of my describing the several details, but reference to the general views in water colour, the ground plans, the elevations, and the photographs exhibited on the walls of the *foyer* of this splendid building (the Reichstag) will at once give a sufficiently clear and full idea of their object and extent. It is only necessary, in addition, to refer to the steam-driven mechanism which works in connexion with the natural ventilation. By means of this system, which does not supplant but only supplements, a constant extraction of used air is accomplished at a minimum rate of 5000 cubic feet per hour per patient from every room when in occupation. The patients spend as much of their time as is possible in the open air under suitable shelter or in appropriate exercise. The windows of sitting-rooms and bedrooms are kept open night and day. The bedrooms all face the south and they open on broad verandahs by large French windows. Each bed has its head to the wall and is placed between the windows, and the opposite door is louvered or swivelled to permit of free circulation of air and opens on to a large airy corridor which is thoroughly lighted. There is no heating apparatus in the bedrooms which are warmed from the corridors with fresh air drawn directly from the outside over steam-heated coils. We have latterly adopted 55° F. as our standard indoor temperature.

The rational therapeutic system carried out at Ventnor may be thus summarised. 1. The diet, into which milk largely enters, is ample, simple, and yet varied and is adapted to the general condition of the patient and the stage of the disease. It is arranged into convalescent, special, and pyrexial varieties, but in every detail is modified according to the exigencies of each case. 2. Rest and exercise are carried out on the principles generally recognised. 3. The freest exposure to the open air of all the patients which is possible, pyrexial patients being carried on their beds or couches on to the verandah on which their rooms open and the supplementing of the natural ventilation of the rooms by mechanical means while in occupation. 4. The scientific treatment of symptoms by remedies directed as much as possible to the diseased processes within the body in which they originate. 5. The reinforcement of the purely medical supervision of the patients by a body of specially trained nurses. 6. The appreciation at their true value of the accessory conditions of climate, site, elevation, shelter or exposure, rainfall, sunshine, and nature, and the relations of soil to water. Did time permit, I should like to compare in detail as regards time, cost, and results the rational system of treatment carried out by me at Ventnor such as I have sketched, with the purely hygienic or expectant treatment, as I have termed it, which has attained its extreme development at Nordrach, but I have already done so elsewhere.[4]

I have already referred to the claim of Koch's tuberculin to be the only specific remedy in tuberculosis, and here in Berlin itself I do not hesitate to state my belief that the reaction of professional opinion against Koch's tuberculin is as unwarranted as its too sanguine and hasty announcement was unwise. In the cases in which I have carried out this treatment it has given most satisfactory and encouraging results. The 10 cases treated in the hospital at Ventnor[5] were examined by Sir Hermann Weber and other eminent specialists. I attribute my success to the circumstance that I regarded the tuberculin as a highly concentrated antitoxin, and diluted it sufficiently to give doses small enough to avoid the excessive reactions which I recognised as essentially destructive in character. I confidently believe that if a perfectly pure tuberculin of equal strength and in sufficiently diluted form could be supplied, and used with the precaution which I have just indicated, the results would go far to justify the original anticipations of its success.

I beg leave to submit, with the necessary reservations, the following table of comparative results of treatment at Ventnor and some of the more famous German sanatoria of which I have been able to obtain statistics. All of the patients included in this table were in the first, the second, or the third stage of the disease:—

—	No. of cases.	Cured. Per cent.	Nearly cured. Per cent.	Total benefited. Per cent.	Not improved. Per cent.	Died. Per cent.	Unaccounted for. Per cent.
Goebersdorf	5032	11·0	15·6	26·6	?	?	73·39
Falkenstein	1022	13·2	11·0	24·2	?	?	76·0
Reiboldsgrün	2000	13·66	56·62	70·28	25·20	4·52	0·0
Royal National Hospital, Ventnor...	5928	17·14	61·11	78·25	16·0	3·95	0·0
Nordrach	—	30·0	65·0	95·0	?	3·53	1·47

It is important to add that the average residence of patients at Ventnor is nine and a half weeks, while at the others it is practically unlimited. The latter also, not being charitable institutions, are free to select or dismiss their patients, who being well-to-do are in their general health and circumstances a much more favourable class for treatment than the poverty-stricken inmates of a public hospital.

[4] Nineteenth Century Review, February, 1899. A translation of the article appears in the commemorative number of the Journal of Dietetic and Physical Therapeutics published in honour of the Berlin Congress for Tuberculosis.

[5] THE LANCET, May 16th, 23rd, and 30th, 1891.

CONSIDERATIONS AS TO THE ETIOLOGY AND SIGNIFICANCE OF DILATED HEART.[1]

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THE object of this paper is not so much to adduce fresh facts respecting the causation of dilatation of the heart as to review the more important factors concerned in its production with especial reference to their relation to one another, to illustrate the essentially symptomatic nature of the condition, and to demonstrate that its significance in relation to prognosis and treatment depends at least as much upon its precise causation as upon its degree. Before considering cardiac dilatation in its ordinary pathological sense it is necessary to recall what modern observations have made clear as to dilatation of the heart under physiological conditions of the circulation. In the case of the healthy heart temporary dilatation may very readily be induced by increased work and within certain narrow limits may, as pointed out by Roy and Adami,[2] Starling,[3] and others, be a mechanical advantage in relation to the ventricular output. These limits are, however, very readily passed and when this is the case the dilatation is an evidence of fatigue—it means that the heart is becoming overdone. And as in the case of other muscles so it is with the heart—fatigue will manifest itself early or late according to the severity of the strain which has to be met and the condition of the muscle at the time. If the muscle is well developed and in a vigorous condition it is capable of responding within considerable limits to the call for increased work, and conversely if the muscle is from any cause enfeebled or out of condition a comparatively slight additional strain will induce fatigue. It is broadly true of the heart as of the voluntary muscles that the liability to fatigue is dependent not on the severity and duration of the strain alone, or on the condition of the muscle alone, but on the inter-relation at the time being between the mechanical strain and the ability of the muscle to cope with the strain. In other words, in the causation of dilatation of the healthy heart which results from fatigue the two essential factors—factors of varying relative importance—are (1) the element of mechanical strain and (2) the condition of the myocardium.

To any who have not given consideration to the subject it may not be obvious how important a bearing the temporary dilatation of the healthy heart under the stress of increased work has upon pathological dilatation. It is, however, easy to trace a gradual transition from the fugitive temporary dilatation of the vigorous heart, the result of some violent exertion—e.g., running or bicycling—to acute dilatation which is unquestionably pathological. If the strain has not been excessive and the heart muscle is healthy the disturbance of equilibrium is but of brief, it may be almost momentary, duration, whereas if the strain has been excessive the fatigue is more lasting and it remains dilated for hours or days or weeks, as the case may be. Again, if the heart muscle is out of condition, whether from lack of training, as a result of disease, or from some other debilitating condition, a comparatively slight increase of work will cause a disturbance of equilibrium—the heart is sooner fatigued than it should be and the liability to definite pathological dilatation is great. In the former case it is the excessive work that is mainly responsible for the overstrain of the heart; in the latter it is the inability of the heart muscle to withstand the increased strain that mainly determines it. It is, however, when the two factors are combined that what under more normal conditions of the circulation would be the temporary dilatation of fatigue passes straightway into definite and more or less lasting pathological dilatation. The importance of both factors, which we may for brevity term the mechanical and the myocardial, is unconsciously recognised in "training," which is, as is well known, mainly a matter of the heart. By judicious exercise the heart is gradually strengthened so that the force of its contraction is capable of effectively counterbalancing for a longer period the increase in work which is thrown upon it during exertion, and if the increased work is sufficiently severe and long-sustained some degree of physiological hypertrophy of the heart ensues. In passing it must, however, be remarked, as emphasised by Roy, that this myocardial hypertrophy, although as strictly physiological as the hypertrophy of the muscles of the athlete or as the "blacksmith's arm," is more liable to undergo regressive metamorphosis than are unhypertrophied muscles.

But training, whilst it pays such attention to thus gradually accustoming the heart to respond to increased work, recognises the myocardial factor in other ways. In strict training just those agents and influences are eliminated which either directly or indirectly depress the heart and interfere with its muscular vigour—as, for example, alcohol and tobacco. They are avoided when the heart is to be driven at high pressure lest their tendency to cause myocardial weakness and to favour dilatation should come into play. My object in referring to these matters respecting the behaviour of the heart under physiological conditions, or under conditions which deviate comparatively little from physiological limits, is to illustrate the essential importance of my first point, that the ability of the heart to withstand the effects of extra work—or what amounts to very much the same thing, the liability of the heart to suffer from the effects of increased strain—is dependent upon the inter-relation that exists at the time being between the element of mechanical strain acting by increasing the intra-ventricular pressure and the condition of the myocardium which has in large measure to bear the strain, and that whilst on the one hand excessive mechanical strain without any important variation in the myocardial factor, and on the other primary myocardial weakness without any increase of work above the physiological mean, may, acting alone, determine a disturbance of equilibrium or definite cardiac breakdown, it is when both factors are combined that the heart is especially liable to pass from a condition of temporary heart fatigue to one of definite pathological dilatation. From which there follows as a necessary corollary the conclusion that, given a disturbance of one factor, a very slight modification of the other may suffice to turn the scale against the heart, a conclusion which underlies the fact familiar to clinicians that when the heart and circulation are in a condition of unstable equilibrium marked variations in the size and behaviour of the heart are very readily induced by comparatively trivial causes.

Reverting to the clinical etiology of pathologically dilated heart we find that when we go behind the numerous clinical antecedents of the condition the same principle still holds good; the two essential factors in its causation are: (1) increased mechanical strain, or more accurately increased intra-ventricular pressure; and (2) myocardial weakness, whether primary or secondary—causes of such secondary myocardial weakness being nutritional or nervous changes, or alteration in the normal relation of the heart muscle to the pericardium. These two essential factors may be operative alone or combined; it is, however, clear that it is the rule, if indeed it is not invariable, for the element of myocardial weakness to play a part sooner or later even in cases in which disturbance of the usual mechanical conditions of the circulation was the primary cause of the heart lesion.

INCREASED MECHANICAL STRAIN AS A FACTOR IN DILATATION.

It is evident that increased intra-ventricular pressure must throw more work upon a hollow muscular organ like the heart, and the three most important proximate causes of intra-ventricular pressure so far as the left side of the heart is concerned are severe or protracted muscular exertion, abnormally high blood-pressure in the systemic circuit, and certain valvular lesions, obstructive or regurgitant, but notably aortic lesions; and for the right side of the heart sustained high blood-pressure in the pulmonic circuit, the consequence of severe mitral lesions or of pulmonary disease associated with circulatory obstruction. That such affections as these are potential causes of dilatation is an elementary fact in cardiac pathology, but we know that in fairly vigorous subjects such lesions, if chronic, are in the first instance usually productive of hypertrophy, dilatation being postponed to a later date. It is true that when hypertrophy does occur there is a certain amount of preliminary dilatation,

[1] A paper read before the Harveian Society of London on May 18th, 1899.
[2] Contributions to the Physiology and Pathology of the Mammalian Heart, Philosophical Transactions of the Royal Society, 1892.
[3] Some Points in the Pathology of Heart Disease, THE LANCET, Feb. 27th and March 6th and 13th, 1897.

but this, except in the case of aortic regurgitation, is relatively unimportant. If, however, the strain to which the heart is subjected should be excessive or the heart muscle be unable to respond to the physiological stimulus of increased work it is primary dilatation—dilatation in the definite pathological sense—which ensues. Now it is when there is a definite tendency to dilatation that other physical factors connected with intra-ventricular pressure come into play and materially aggravate the effects of the primary mechanical difficulties with which the heart muscle has to contend. I refer to two, the importance of which was so ably demonstrated by the late Professor Roy in conjunction with Professor Adami, though hardly done justice to by clinicians. 1. That the ventricles do not normally become completely empty at the end of systole but that some residual blood remains behind, its amount being readily affected in either direction by variations in the aortic pressure. A moderate increase in the amount of residual blood does not interfere with the output of a vigorous heart but it is otherwise when the heart is already overtaxed; then the amount tends to increase and *per se* adds to the difficulties of the heart. Now this point is surely one of much practical importance; it means that a relatively slight increase of aortic pressure, especially so if accompanied by weakness of the systole, may by increasing the residual quantity of blood directly embarrass the heart and, though the initial departure from the normal be slight, in this way produce a cumulative effect. The recognition of this tendency will explain how in certain unstable conditions of the circulation a very moderate increase of blood-pressure or slight loss of tonus in the heart muscle may be the actual starting-point of a progressive dilatation or may greatly intensify a tendency to dilatation from some other cause. It also emphasises the potential importance of a very slight degree of pathological dilatation of the heart and confirms what clinical experience teaches—that the part played by separate etiological factors must be carefully sifted out and their influence as far as possible be eliminated if further mischief is to be prevented. 2. The second fact connected with the physics of the heart to which I refer is that the strain upon the walls of a sphere or spheroid increases with its circumference and therefore the resistance to contraction of the heart muscle is increased whenever it becomes dilated. This consideration, taken in conjunction with what has been said respecting the relation of increase in the residual blood, leads to the conclusion that a dilated ventricle is *per se* unfavourably placed for meeting increased work. It is evident, therefore, that in dealing with the element of mechanical strain in the causation of dilatation and in gauging at the bedside its importance in any given case we have to do with other factors besides the primary increase of intra-ventricular pressure. We have, so to speak, added to the primary strain certain secondary effects referable to disturbance in the physical condition of the circulation which the primary lesion has induced.

There are other factors which must not be neglected in connexion with cardiac overstrain from mechanical causes—the effect of variations in the volume of the circulating fluid, the part played by the nervous mechanism of the heart in adapting its action to varying physical conditions, and alterations of pressure in the large systemic veins, but these cannot be considered here.

Before passing on to the consideration of the myocardial factor in the causation of cardiac dilatation it may be well to refer to the fact that even in cases where the element of mechanical strain has been the primary factor the condition of the myocardium has very much to do with later developments. Thus the dilated heart of chronic high arterial tension is partly due to the rise of intra-ventricular pressure and partly to changes in the myocardium, degenerative, toxic, or the consequence of defective nutrition. In the latter connexion the precise condition of the coronary circulation is of much importance—an importance which appears to be considerably under-estimated to judge by current descriptions of heart cases. Physiologically it is well known that one of the important conditions influencing the vigour of the heart beat is the blood-flow in the coronary arteries; a rise of blood-pressure at the root of the aorta with a corresponding improvement in the coronary circulation causes increased ventricular contraction, and conversely a fall of blood-pressure in the aorta leading to a lessened blood-flow in the coronary arteries causes diminution in the force of the heart beat. So important is this relation of the coronary to the general circulation that a general rise of blood-pressure in the systemic circuit *may* by increased vigour of the heart more than counterbalance the effects of the increased strain on the left ventricle which the rise of systemic blood-pressure causes, and conversely a fall of general blood-pressure by interfering with the coronary circulation may more than neutralise the effects of lessened work and lead up to myocardial failure.

It is not uncommon for us to observe at the bedside that in certain pathological states—notably chronic Bright's disease—the condition is comparatively satisfactory while the general blood-pressure remains high, whereas coincidently with the fall of blood-pressure below a certain point the heart goes to pieces. This heart failure is commonly explained as being due to the heart muscle giving out in consequence of the prolonged strain to which it has been subjected, and no doubt this is true; but it appears to me extremely probable that once this diminution of general blood-pressure does supervene from commencing heart failure the progress of the latter may be greatly accelerated by a consequent fall of blood-pressure in the coronary arteries leading to imperfect nutrition of the heart muscle. Then, again, is it not probable that the marked liability to sudden heart failure in cases of advanced aortic regurgitation is in part due to the abnormally low blood-pressure in the aorta and consequent interference with the coronary circulation? Other instances might be given, but enough has been said to illustrate the point that in considering the relation of variations in the general blood-pressure to the condition of the heart the relationship between the general blood-pressure in the systemic circuit and the local blood-pressure in the coronary area must be taken into account.

MYOCARDIAL WEAKNESS AS A FACTOR IN DILATATION.

Inasmuch as in every case of dilatation of sufficient degree there is some measure of myocardial weakness which is the direct consequence of the dilatation it is necessary to remark that we are here dealing with the myocardial weakness as the primary and predominant factor in the actual causation of the dilatation. Examples of this are the dilatation of acute specific diseases with or without actual myocarditis, fatty and other forms of degeneration, fibrosis, senile myocardial weakness, the dilated heart of severe anæmia, of nervous or general debility, and that associated with toxic causes. Clinically careful examination and inquiry usually enable us to decide as to the cases which belong to the category of primary myocardial weakness, for they are generally characterised by an absence of any adequate explanation in the direction of mechanical strain, by the direct physical evidences of myocardial weakness as distinct from the associated dilatation, and by collateral evidence pointing to the operation of one of the above causes. The occurrence of more or less dilatation in acute specific diseases is well known, but there are important differences as to the degree of dilatation and the relative importance of dilatation and essential myocardial weakness. Thus in diphtheria, typhoid fever, and pneumonia, in all of which heart failure is one great source of danger, the amount of dilatation may not be great although the degree of myocardial feebleness due to the toxæmia is very formidable. In this connexion the recent observations of my colleague, Dr. Lees,[4] respecting dilatation of the heart in acute rheumatism are of much interest. He has shown, and his observations have been supplemented by those of Dr. Poynton, that the heart may be much dilated in the entire absence of pericarditis and endocarditis, that in the presence of these complications the dilatation is frequently associated rather than consequential, and that, as a rule, this dilatation is not accompanied by symptoms of actual heart failure although both during the acute phase of the illness and in more remote ways it may be of serious consequence. As an instance of how that sometimes the dilatation is conspicuous and at others myocardial weakness without much enlargement influenza may be mentioned, which is so frequently accompanied by more or less heart failure. Then, again, in the more chronic forms of dilated heart we find that the degree of dilatation is very variable and has no constant relation to the severity of the case. Fatty and granular degeneration of the heart muscle and the extreme cardiac asthenia of Addison's disease may be

[4] Transactions of the Royal Medical and Chirurgical Society vol. lxxxi.

accompanied by very little variation in the size of the heart, whereas a heart with senile myocardial weakness may remain much enlarged for years with but very little in the way of severe symptoms. So important is this lack of correspondence between the amount of actual enlargement of the heart and the degree of muscular feebleness or degeneration that clinically our prognosis has to be based not so much upon the degree of dilatation as upon its cause and the amount of contractile vigour possessed by the heart muscle as evidenced by the pulse, the characters of the cardiac impulse, and of the heart sounds.

I have for some time past been very greatly impressed with the frequency and relative importance of toxic factors in causing or aggravating cardiac dilatation. The most striking instance of this is of course alcohol, which has so much to do with the etiology of the large number of dilated hearts seen in hospital out-patient practice. Alcohol, given in sufficient quantity under experimental conditions, acts as a direct depressant to the cardiac muscle. It causes weakening of the ventricular contractions, and if given in large enough dose induces dilatation, which may be accompanied by relative incompetence of the auriculo-ventricular valves. If we recall in this connexion that given slight dilatation any degree of superadded myocardial weakness will seriously handicap the heart we have no difficulty in understanding the disastrous effects of alcohol on the heart and circulation. But with ordinary drinkers there are other factors besides the direct toxic action of the alcohol on the heart muscle; the large amount of fluids ingested is in itself sufficient to increase the intra-ventricular pressure, and this tendency may be intensified by the high arterial tension so often present in alcoholics. From extended and critical observation it appears to me that it is difficult to over-estimate the importance of alcoholic excess in causing or precipitating cardiac breakdown more especially in the degenerative period of life, though in speaking thus of the abuse of alcohol I do not of course under-estimate its value when judiciously employed. I said above "cause or precipitate" cardiac breakdown because alcoholic indiscretion is especially important when the heart is already overtaxed by increased mechanical strain, and when this is the case an amount of alcohol which under normal circulatory conditions would not injure the heart is sufficient to cause irreparable damage. There are many instances of this in every-day practice, such as chronic high tension and valvular lesions affecting the left side of the heart and emphysema affecting the right ventricle, in all of which failure of compensation is very liable to be prematurely induced by indiscretion in this respect.

This reference to alcohol necessitates brief allusion to other toxic agents, such as nicotine and, to a less extent, caffeine and possibly other constituents of tea. The abuse of tobacco, as is well known, causes various functional disturbances of the heart, such as cardiac pain, palpitation, tachycardia, irregularity, and the latter may if severe react unfavourably on the mechanics of the circulation; but what is of most importance in connexion with dilated heart is the direct toxic action of nicotine on the heart muscle similar to that produced by alcohol, if present in sufficient amount. I do not think that there is much clinical evidence that tobacco is a relatively important factor by itself in causing dilatation, but I am convinced from clinical observation that when the heart is already embarrassed indiscretion in this respect is highly injurious, producing just that lack of tone in the heart muscle which in the presence of mechanical embarrassment is enough to disturb compensation. Having alluded to the influence on the heart of the poisons of infective diseases and of certain known chemical poisons introduced from without, such as alcohol and nicotine, I must mention that it seems highly probable that toxæmic agents of another kind may also under certain circumstances directly depress the heart as well as indirectly through causing high tension. I refer to auto-intoxication of gastro-intestinal origin. At present the relation of this complex subject to the condition of the circulation is one for observation rather than deduction, but the clinical fact that a marked improvement in the strength of the heart's action at times coincides with the cessation of abnormal fermentative changes in the digestive tract is not without its significance and is not by any means always explicable as being due to relief of pressure. This consideration of the part played by toxic agents in causing or aggravating a tendency to dilatation and the wider question of the relation of the condition of the heart muscle in general to dilatation, alone or in conjunction with the element of increased mechanical strain, leads up to a fresh enunciation on pathological grounds of the principle to which prominence has already been given mainly on physiological grounds, that the essential factor in the etiology of dilatation is the relation that subsists in any given case between the work which the heart has to do and the condition—structural and functional—of the myocardium at the time being, so that in disease while alterations in the mechanical conditions of the circulation alone or primary weakness of the heart muscle alone may induce dilatation, in a very large proportion of cases when serious dilatation ensues both factors are combined, though in very variable relative proportions and with marked differences as to dates of incidence.

No more striking instance of this inter-relation could be given than that afforded by heart diseases in which alterations in the physical conditions of the circulation play an obviously important part. Take two examples—mitral regurgitation associated with rheumatic endocarditis and chronic high arterial tension. In this form of mitral regurgitation it is, as is well known, the rule, if there is good compensation, to find the left ventricle dilated and hypertrophied and the right ventricle also; and a certain amount of dilatation, always provided it is accompanied by sufficient hypertrophy, is an advantage in that it conduces to increased output on the part of the left ventricle and to the projection into the aorta of a sufficient volume of blood, notwithstanding the leakage through the mitral orifice. In some cases of mitral disease, however, the amount of mitral regurgitation is out of proportion to the damage to the valve structures found post mortem; when that is so there is usually marked dilatation of the left ventricle and we are justified in concluding that the excess of mitral regurgitation over and above that due to the sclerotic changes in the valves set up by the endocarditis is referable to added incompetence from relaxation of the circular band of muscular fibres, which forms a kind of sphincter for the auriculo-ventricular orifice, so that even in a case of mitral regurgitation associated with structural deformity of the valve from endocarditis myocardial weakness with associated dilatation plays a highly important part in the cardiac embarrassment. If severe this adds to the circulatory embarrassment in another way, it leads to a fall of blood-pressure in the systemic arteries, for the much-dilated and weakened left ventricle cannot satisfactorily maintain an adequate output with each heart beat. Precisely the same point is illustrated by the effects of treatment in cases of severe mitral regurgitation with failing compensation. With absolute rest, measures to relieve the venous engorgement and digitalis, compensation is restored. The symptoms and effects of back-working diminish, the heart becomes more regular, the cardiac dulness shrinks, the impulse becomes more forcible, and the amount of mitral regurgitation lessens—the diseased valve remains unaltered, but the heart muscle has regained its vigour.

So important is this muscular action in relation to the auriculo-ventricular orifice that, as Starling points out, it is probable that so long as the circular band of muscular fibres surrounding the orifice is intact perforation of the valve does not cause much disturbance. It is when fatigue of the heart muscle sets in or the orifice is held firmly by sclerosed connective tissue that severe incompetence occurs. The second example of the importance of the myocardial factor in conditions in which the element of increased mechanical strain plays the chief part in etiology was chronic arterial tension. Of this we need only remark that the conspicuous variations in different cases in the behaviour of the heart under the stress of increased strain of peripheral origin are intimately dependent upon differences in the ability of the myocardium to adapt itself to the altered blood-pressure and thus maintain compensation for a longer or shorter time and that it is frequently possible to trace the onset of failure of compensation to the supervention of definite myocardial weakness due to toxic or nutritional causes.

THE SIGNIFICANCE OF DILATED HEART.

Leaving aside strictly physiological distension of the cavities of the heart and strictly compensatory dilatation as in some valvular lesions the general significance of dilatation is that there is or has been a disturbance in the relation which should subsist between the work which the heart has to do and the power of the heart muscle to perform it. Physiological dilatation is (beyond certain narrow limits) an evidence of heart fatigue, pathological dilatation is an evidence of heart over-strain, and frequently the precursor

of heart failure. But what concerns us from the point of view of prognosis and treatment is the special significance in an individual case of any cardiac dilatation that may be present. This we can best ascertain by attention to the following points.

1. *The degree of dilatation.*—Now, as Roy and Adami pointed out, under physiological conditions dilatation is the equivalent of fatigue, so that the measure of the dilatation is a reliable indication of the degree of fatigue. From this the deduction is drawn that in "a diseased heart the degree of dilatation is in inverse ratio to its power of doing its work." In diseases of the heart we certainly do find that, other things being equal, the more severe the dilatation the greater the embarrassment of the heart, and it is no doubt broadly true that the degree of dilatation is in inverse ratio to its power of doing its work, but the converse of this certainly does not hold good owing to the fact that under pathological conditions the other things are not equal; and the further we depart from the comparatively simple conditions of a normal heart yielding under the stress of increased work the less reliance can we place on the degree of dilatation as in itself a gauge of the significance of the lesion. We must take note of other factors and the next one to be considered is—

2. *The condition of the myocardium with which the dilatation is associated.*—It is well known that a man with fatty degeneration or syphilitic fibrosis or gumma of the heart walls, or with disease of the coronary arteries, may be on the brink of a catastrophe although the heart is but little dilated, whilst another with much enlargement of the heart, including considerable dilatation, may have years of life and usefulness before him. In the one case the heart may suddenly give out without any definite exciting cause; in the other so long as the work thrown upon it is kept within bounds it will continue to perform its functions for a prolonged period. The determining factor is the myocardial one, the structural and functional condition of the myocardium. And in so far as we can estimate the amount of contractile vigour which the heart muscle possesses we must regard it as important in itself and also as an evidence of neuro-muscular tone. Having ascertained the degree of dilatation and the condition of the heart muscle with which it is associated we pass on to the third factor—

3. *The precise etiology of the dilatation, with especial reference to the relation of the heart condition to the general health, the relative importance of the mechanical and myocardial factors in its production, and whether one or both of these factors is still operative.*—In some cases both factors have been largely responsible and their precise relationship is not of very great importance—e.g., the severe dilatation of anæmia in which the muscular feebleness incidental to the blood state has been combined with injudicious exertion, but in others when one of the two factors has been in the ascendant it is highly important to recognise this. For instance, the significance of the acutely dilated heart from athletic over-strain in a young man is very different from the acute dilatation induced by violent exertion in a man of advanced years or one whose health has been impaired by alcoholic excess. Or, again, we regard very differently moderate dilatation associated with chronic high tension and the same degree of dilatation due to senile myocardial feebleness. The further question as to whether one or both factors has ceased to be operative is closely connected with this. The dilated heart of athletic over-strain when adequate rest is assured we may expect to do well because the causal condition is no longer acting and the heart is capable of pulling itself together, but we cannot say the same of a similar degree of dilatation associated with the persistent strain of chronic high tension in renal disease. Likewise, we may be able confidently to predict restoration of tone to the heart muscle which has been temporarily depressed by some toxic agency no longer operative, whereas it is far otherwise with the myocardial weakness of senile or degenerative origin. Our next factor in prognosis is derived not from a consideration of the anatomical conditions of the heart but of the extent to which, abnormal as it is, it is capable of carrying on its primary physiological functions in relation to the general circulation. We accordingly inquire as to—

4. *The extent to which the work of the heart in relation to general circulation is affected.*—Apart from physical signs this we chiefly estimate by noting any definite cardiac symptoms or any manifestations of backward pressure on the venous side. This is the basis of what we must all recognise, that in dealing with heart cases it is necessary to weigh symptoms and physical signs together, and that not uncommonly the former teach us more than the latter as to the extent to which the cardiac lesion is interfering with its work. The last point to which I would direct attention is—

5. *The course of the case and the effect of treatment.*—Just as the test of the physiological integrity of a heart temporarily dilated by excessive strain is the readiness with which it resumes its normal size and action when the stress has been removed, so the test of recuperative power on the part of the pathologically dilated heart is its ability to react to therapeutic measures. Dilatation which rapidly diminishes under strict rest or which improves with graduated exercise is evidently of less serious import than one which requires prolonged rest and powerful cardiac tonics. The converse of this is nowhere better illustrated than in chronic valvular disease. With each successive breakdown of compensation there is less and less response to therapeutic measures until a stage is reached (no doubt coincident with irreparable myocardial failure) when precisely the same measures fail to make any impression—a sure sign that dissolution is not far distant.

The matters to which I have given prominence may be thus summarised: that in the etiology of cardiac dilatation the two essential factors, factors of varying relative importance, are (1) the element of increased mechanical strain, and (2) myocardial weakness, primary or secondary; that the liability of the heart to suffer from the effects of increased work is dependent upon the inter-relation that exists at the time being between the element of mechanical strain and the condition of the myocardium which has in large measure to stand the strain, and that it is when increased mechanical strain and myocardial weakness are combined that there is the greatest liability to severe cardiac dilatation. We have seen that a dilated ventricle is *per se* unfavourably placed for coping with increased work, that given a slight degree of dilatation from mechanical causes toxic and other agencies which depress the heart muscle may greatly intensify the cardiac embarrassment, and that in a large proportion of cases in which alterations in the mechanical conditions of the circulation constitute the primary factor in the production of dilatation its later progressive development is attributable to the supervention of myocardial changes. Then with respect to the significance of the dilatation that just as physiological dilatation (beyond certain narrow limits) is an evidence of heart fatigue, pathological dilatation is an evidence of heart overstrain—past or present—and that in order to estimate its significance with any degree of accuracy we must take note of the degree of dilatation, the condition of the heart muscle with which the dilatation is associated, its *precise* etiology, the extent to which the work of the heart in relation to the general circulation is affected by it, and the amount of recuperative power which the heart, and we may add the individual, possesses, this recuperative power being evidenced by the course of the case and its reaction to treatment.

A broad view on lines such as these is essential if we are to avoid the extremes of making too much or too little of any given cardiac dilatation, and perhaps at the present time the former is as important as the latter.

Upper Berkeley-street, W.

MEDICAL TOWN COUNCILLOR.—On May 25th, at a municipal election at Bath, Dr. G. A. Bannatyne was returned by a large majority as representative of the Lansdown Ward.

PRESENTATIONS TO MEDICAL MEN. — Mr. James McKay, M.B., Ch.B. Aberd., of Towie, has been presented by the members of the local class under the St. Andrews Ambulance Association with a silver kettle with a spirit-lamp as an acknowledgment of his first-aid instructions to the class.—At Blackburn, the ambulance class conducted by Mr. Edward Oliphant, M.B., C.M. Aberd., was brought to a close by an "At home," held in the Drill-hall, on May 19th, when the certificates were handed to the successful members, following which Dr. Oliphant was the recipient from the class of a marble timepiece in recognition of his services.—Mr. P. E. Corlis, M.D., Wooster, Cleveland, U.S.A., was entertained at a conversazione by the citizens of Ballina, New South Wales, and presented by them with two addresses prior to his leaving that city.

ANEURYSM OF THE SUBCLAVIAN ARTERY; LIGATURE OF THE FIRST PORTION OF THE SUBCLAVIAN, FOLLOWED IN THIRTY-EIGHT DAYS BY REMOVAL OF THE ANEURYSM.

By HERBERT W. ALLINGHAM, F.R.C.S. ENG.,
SURGEON TO THE HOUSEHOLD OF H.R.H. THE PRINCE OF WALES; ASSISTANT SURGEON AND LECTURER ON OPERATIVE SURGERY AT ST. GEORGE'S HOSPITAL.

A SEAMAN invalided from the Royal Navy, aged 25 years, was admitted into St. George's Hospital on Feb. 20th, 1899, and gave the following history. Three years previously he had noticed a swelling above the right clavicle which increased gradually in size. This increase had been especially marked during the 12 months previously to the date of his admission and during this period he had suffered from occasional attacks of numbness and severe aching pain in the right upper extremity. The pain, which at first occurred only at intervals, had lately become continuous without being accompanied at any time by swelling below the tumour. The patient's general health had always been good and syphilis was denied. On examination the patient was obviously in good health and of good muscular development. He exhibited a pulsating expansile swelling in the right supra-clavicular region, filling the interval between the sterno-mastoid and trapezius muscles, and in size of about that of a Tangerine orange. There was a characteristic systolic bruit with delay and diminution of the right radial pulse. Some slight tenderness on pressure over the tumour was evident, but otherwise there was no symptom except the pain passing down the inner side of the arm and forearm to the little finger. A consultation with my colleagues was held and it was decided to ligature the subclavian artery on the cardiac side of the tumour. This was done on March 1st through a V-shaped incision, one arm of the V being down the anterior border of the sterno-mastoid and the other arm along the clavicle. The flap of skin was turned up. The sterno-mastoid muscle was divided and the first part of the subclavian artery was exposed and a kangaroo tendon passed round the vessel immediately external to the origin of the vertebral artery and just to the inner border of the scalenus anticus. The recovery from this operation was complete and at no time was there any indication of secondary hæmorrhage. No pulsation was felt in the tumour or in the brachial or radial arteries. On the 4th some slight beating was detected in the aneurysm, which continued, its amount being carefully noted day by day. The sac meanwhile was distinctly smaller and harder. On the 17th, as the pulsation was still decided, the patient was again anæsthetised and a further consultation was held. It was found that the tumour although pulsating did not expand with the beat of the heart and it was therefore considered advisable to further watch its progress before attempting more radical measures. On the 28th it was noted that the aneurysm was increasing in an upward direction and that there was more pulsation which was both visible and palpable. On April 8th, my colleagues, Mr. Holmes, Mr. Dent, and Mr. Turner, to whom I am much indebted for their valuable advice, being present, and assisted by my colleague Mr. Jaffrey and Mr. Collard, the radical operation was performed. The whole length of the clavicle was exposed by a transverse incision and in order to get plenty of room to deal with the aneurysm a vertical incision was made at right angles to the transverse incision. Then large skin flaps were reflected and the greater part of the clavicle was resected, leaving only the two extremities. Careful dissection revealed the aneurysm springing from the upper and anterior aspect of the vessel in its third portion. With great care the cellular tissue, the nerves, and the vessels surrounding the aneurysm were dissected off the sac. Then the axillary artery was sought for, ligatured with silk, and divided on the distal side of the tumour. This procedure allowed the aneurysm to be freed from the first rib and turned upwards and so to bring into view the second part of the subclavian artery on the proximal side of the aneurysm. This part of the artery was ligatured with silk and the aneurysm was cut away. During the dissection the transversalis colli artery was divided as it crossed the tumour and some few fibres from the brachial plexus passing into the pectoralis major muscle were also divided. The lower part of the brachial plexus was adherent to the upper part of the tumour and had to be dissected off it. Some difficulty was experienced in separating the subclavian vein which received a slight tear, necessitating a lateral ligature. The amount of blood lost was quite inconsiderable, notwithstanding the number of vessels divided, owing to the establishment of so free a collateral circulation. The operation occupied two hours. The after-history was unimportant, healing of the large wound taking place after some slight local skin sloughing. A section of the

Figure showing sac of aneurysm removed from the subclavian artery. A, Axillary artery. S, Subclavian artery.

aneurysm shows that its cavity is largely occupied by firm clot, the blood passing into it from the subclavian, which was partly patent, and out posteriorly by way of what appeared to be the profunda cervicis. In shape it resembled a pear with the stalk external and the base upwards. The axillary artery, as far as it was exposed in the wound, was found to be obliterated. A careful examination of the arm was made on May 5th, and it was found that pulsation was present in the brachial artery, best marked in the ante-cubital space and also in the radial at the wrist. The ulnar was not felt. The hand and fingers were somewhat pallid and colder than those of the opposite limb; this condition, however, is undergoing improvement from day to day.

Remarks.—There are many points of interest in this case, not the least of which is the fact that it is apparently unique as far as the measures adopted for its relief are concerned, a search through published records having revealed no similar case. To take them separately. First, the ligature of the first portion of the main vessel was followed by decidedly good results, limited though these were to a hardening of the aneurysm and diminution in its pulsation. It is interesting, also, that the procedure was not followed by secondary hæmorrhage as is supposed to follow on ligature of the first part of the subclavian artery. As there was no prospect that the pulsation would cease altogether, the difficult and severe expedient of removal was resorted to five and a half weeks after the preliminary operation. Here it may be remarked that the hardening and, if one may so put it, the better definition of the tumour brought about by a previous ligature of the subclavian rendered the complete removal easier and more expeditious than if a soft, thin-walled sac had had to be dealt with, in addition to the probability that had rupture accidentally occurred during manipulation loss of blood would have been less excessive owing to the small calibre of the channel through the aneurysm. Secondly, the preliminary ligature had caused the collateral anastomosing channels to become active that fear of gangrene was at no time entertained. Thirdly, removal of the greater part of the clavicle was necessary in this case, access to the sac and to the vessel below being impossible without this operation. Even now, so soon after the operation, the patient can perform all of the usual movements without difficulty, although it can hardly be expected that he will retain full

power of the arm after removal of so much of the clavicle. The excellent outcome of this case warrants the putting forward of the treatment adopted as worthy of consideration in similar cases, and should the question of removal of the sac be entertained I believe, for the reasons indicated above, that the preliminary ligature of the main vessel on the cardiac side will go far to ensure success. That the risk of the occurrence of gangrene was minimised by the establishment of the free collateral circulation is evident, although the subclavian vein was wounded and partially occluded.

I am much indebted to Mr. Stuartson Collard, surgical registrar, for the excellent notes which he has taken of this case; also to the house surgeons, Mr. Houseman and Mr. Roderick, for the great interest and care which they took in conducting the case to a successful issue.

Grosvenor-street, W.

A CASE OF RAPIDLY INCREASING ARTERIO-VENOUS ANEURYSM OF THE FEMORAL VESSELS SUCCESSFULLY TREATED BY EXTIRPATION OF THE SAC.

BY WILLIAM MURRAY, M.D. DURH., F.R.C.P. LOND.,
AND
FREDERICK PAGE.

A MUSCULAR, well-developed, steady-living man, 26 years of age, consulted Dr. William Murray on Nov. 10th, 1898, on account of a pulsating tumour situated at about the middle of the right thigh. He stated that some eight years previously, while fashioning a boat between his knees with a sharp pocket-knife held in his left hand the blade glanced off the wood and entered his right thigh. The wound bled profusely, but he was able to reach his home a few yards away. The wound was dressed with a pad of cotton-wool, secured by means of an elastic bandage and in a few days it was healed. The patient said that he noticed pulsation immediately after the wound was healed. He was not so sure as to when he had first noticed a swelling, but it was not long after the accident. The swelling gradually increased in size and during the last few months it had enlarged rapidly. He had not allowed the condition to interfere with his occupation, that of a clerk, or with his amusements. He was a very active man and had run races and ridden long distances on his bicycle constantly since the accident without much inconvenience. Lately, however, owing to the rapid enlargement of the swelling and to the increased pulsation and thrill in the limb, his sleep had been interfered with and he had become apprehensive that the swelling would burst. His right leg ached a good deal and was often numb. Upon examination with Dr. Murray we found a pulsating swelling as large as a fist just under the skin covering the site of Hunter's canal. In it could be heard and felt the thrill characteristic of communication between an artery and a vein. This thrill could be heard distinctly along the course of the vessels of the leg, in the sole of the foot, and in the iliac arteries. There was no œdema of the leg, nor were any enlarged superficial veins to be seen. The limb was as well nourished as was the other. On Nov. 16th an elastic tourniquet was first placed round the leg immediately below the knee, and then a second one round the thigh as high up as possible. An incision some eight inches long was then made over the course of the femoral vessels and the sac was exposed. It was with difficulty dissected free from the muscles, to which it was pretty closely adherent. The artery and vein, both much dilated but otherwise apparently healthy, were tied three-quarters of an inch above their communication with the sac with catgut ligatures. A quarter of an inch below the point of communication the artery was found to be smaller than was natural and the vein to be much larger. They were both secured with catgut ligatures. The sac was then dissected out and was, together with the attached portions of the artery and the vein, removed. A considerable number of vessels required to be tied. A strip of iodoform gauze was introduced as a drain and the wound closed with silkworm gut. The operation lasted a little over an hour. The sac contained liquid and coagulated blood. In some places it was very thin indeed and in others it was thickly coated with calcareous material. On the 18th the circulation in the foot was excellent. A good deal of bloody serum had drained from the wound. The gauze was removed. The stitches were taken out on the 21st. On the 30th the patient was allowed to sit up in bed and on Dec. 8th he returned to his home cured. He remains quite well and is free from inconvenience.

Remarks by MR. PAGE. — In February, 1891, Dr. B. Farquhar Curtis of New York published in the *American Journal of Medical Science* a report of two cases of arterio-venous aneurysm of the popliteal artery and vein. In both he tied the popliteal artery and vein above and below the seat of puncture and dissected out the sac with the portions of artery and vein attached. Both patients were permanently cured. Dr. Curtis, in his very able and valuable paper expresses the opinion that all cases of aneurysmal varix and of varicose aneurysm should be operated upon with the exception of those "involving the internal jugular or requiring ligature of the common femoral artery and vein." He reviews the methods of treatment under six heads—compression, Hunterian ligature, double ligature of the artery and vein, ligature of both vessels above, incision of the sac with ligature of the vessels, and extirpation—and gives the results of a number of cases treated by each method. He has collected details of 20 cases of varicose aneurysm treated by extirpation of the sac, with 19 cures and only one death. The death arose from sepsis, though the operation was performed in the year 1878 and by a thoroughly competent surgeon. It was an accident. Among the 20 cases there were six femoral, three popliteal, and three axillary varicose aneurysms, all of which were permanently cured. In the others smaller vessels were involved, the fatal case being one of the radial artery and vein.

In 1898 Dr. W. W. Keen of Philadelphia tied the common carotid and the internal jugular vein above and below on account of a very rapid advancing varicose aneurysm in the case of a boy, aged 15 years, and attempted to extirpate the sac. The whole of the sac could not be removed, but the lad was cured. Dr. Keen says, however, that he would not have interfered had it not been imperative to do so. He agrees with Dr. Curtis that cases of arterio-venous aneurysm of the common carotid and internal jugular seldom require surgical treatment.

I have a patient under observation who was stabbed in the neck in the year 1891, and who was shown at a meeting of the Clinical Society of London soon after the accident. He had, and still has, an aneurysmal varix of the common carotid and internal jugular vein, but no aneurysm has developed, though the vein is very much dilated. He is in fairly good health and has been working as a pitman for the greater part of the time since the accident. English surgeons seem to be much more reluctant than American surgeons are to interfere in cases of aneurysmal varix and varicose aneurysms, and perhaps extirpation would not be the method most in favour with us on this side of the Atlantic in cases where interference was considered to be necessary. The results of extirpation, however, appear to be much more satisfactory than are those of any other method of treatment.

Newcastle-on-Tyne.

A FATAL CASE OF BENZINE POISONING.

BY FREDERICK SPURR, L.S.A.

THE following case appears to me to be worthy of record, as poisoning by benzine is extremely rare and also because in the few recorded cases which I have been able to find the symptoms and pathological action of the poison have varied so considerably that any fresh information on the subject should be of interest.

Ziemssen[1] says: "In spite of the great use made of benzine in the arts and manufactures there has been till quite lately only one recorded case of poisoning by

[1] Cyclopædia of Practical Medicine, vol. xvii., p. 512.

benzine—that of Perrin—which resulted from swallowing a large quantity of the liquid. The symptoms were those of simple narcosis, terminating in recovery." No allusion to benzine poisoning is made by Sir R. Christison,[2] or by Taylor and Stevenson,[3] and while Wynter Blyth[4] describes the effects of benzine vapour he does not mention the liquid itself. Guy and Ferrier merely remark that "both benzine and its vapour possess poisonous properties." With regard to the observed symptoms and effects of this poison a case is recorded in THE LANCET[5] of a woman who became "suddenly unconscious" and who "was found on examination to have swallowed a quantity of benzine," presumably in mistake for medicine, but whether she recovered or whether she died is not stated. The only other case which I can find recorded in THE LANCET[6] is one reported by Rosenthal of Magdeburg of "a little girl, 18 months of age, who had swallowed half an ounce of commercial benzine. She lost consciousness, the pulse became small and rapid, and the respiration very quick, with râles at times. Both on washing out the stomach and on administering an enema shreds of bloody mucus came away." Dr. J. Dixon Mann,[7] after relating several cases of poisoning by benzine vapour, continues: "Averill met with a case in which a man who accidentally swallowed three or four drachms became pale and unconscious, with small, weak, rapid pulse, and slow respiration; pupils did not react to light. Recovery occurred, but the odour of benzine was perceptible in the breath after 62 hours." Kelynack[8] records a fatal case in a woman, aged 26 years, who drank about an ounce of benzine. When seen six hours afterwards she was unconscious, the pulse was very quick and feeble, and the respirations were rapid. The pupils were slightly contracted and were reactionless, the extremities were cold, and the lips, the ears, and the nose were distinctly blue. After subcutaneous injections of ether and strychnine she became sufficiently conscious to complain of pain in the abdomen, of severe frontal headache, and of nausea. Diarrhœa set in and death took place from cardiac failure 12 hours after the poison was taken. Post mortem the tissues were hyperæmic, there were a few hæmorrhages in the bronchi and in the small intestines, but no erosions of the alimentary tract. Falk[9] records a fatal case in a child two years old in which death took place in 10 minutes after a mouthful of benzine had been swallowed. The post-mortem appearances were negative. In the foregoing cases the action of the poison appears to have been in the main that of a narcotic, with indications of irritant action in the one instance quoted by Kelynack and in Rosenthal's case. Ziemssen,[10] however, states that "according to verbal communication of Professor F. A. Hoffmann there was some years ago in the Charité Hospital at Berlin a case of considerable interest because it commenced with symptoms of corrosive poisoning. The patient was said to have taken a quantity of benzine with suicidal intent and died after some days of purulent pleurisy which originated in a perforation of the œsophagus."

The patient in the present case was a tall, somewhat emaciated, and dark-complexioned woman, aged 26 years, who had suffered from epilepsy (*petit mal*) since she was 18 years of age and who had also slight chronic bronchitis. She had been under my treatment for nearly 18 months, and though the epileptic attacks were much less frequent than formerly she was very irritable and depressed at times and had more than once threatened to commit suicide. At about 5 A.M. on April 11th, 1899, her sister heard her moving about the bedroom. Thinking she had had a fit she got up. She noticed a strong smell of benzine in the room and saw lying on the floor an empty bottle which she knew had contained benzine. The woman said that she had taken it and the sister immediately prepared and gave her a strong emetic of mustard and water, after which she vomited freely several times. She then complained of severe burning pain in the stomach, the throat, and the mouth, but remained perfectly conscious, and at about 8 A.M. she was able to walk downstairs with a little assistance and was laid on a couch. About 9 A.M. I was sent for and saw the patient during the forenoon, about seven hours after she had taken the poison. She then complained of severe burning pain in the stomach and chest, of great difficulty in swallowing, and of a sense of extreme weakness. She told me that the bottle—an ounce bottle—was nearly full and that the benzine had burnt her throat and her mouth as she swallowed it. The tongue was white, as if smeared over with white paint, and the fauces presented a similar appearance and were slightly swollen. There was great epigastric tenderness. The pulse and respirations were 88 and 24 respectively and the temperature was normal. The pupils were equal and dilated and reacted freely to light. During the day she had slight diarrhœa which did not continue. On the 12th she was much worse. She had had a bad night, as the pain in her throat and stomach was very great. Her sister stated that the patient had only been able to swallow a few drops of fluid at a time and that her breathing had been very short and rapid all through the night. I found her in a state of great exhaustion. The pulse was feeble and rapid, the respirations were from 36 to 40, and the temperature was 103° F. She could only speak in a whisper. There were loud, moist râles all over the upper part of the chest, slight dulness on percussion, and crepitations over the lower lobes. There was still extreme tenderness on palpation in the region of the epigastrium. I gave a hypodermic injection of strychnine and suggested rectal feeding, but as the patient became unconscious and was practically moribund before preparations could be made this was not carried out. On the 13th I was called to see the patient about 4 A.M. and found her comatose; the pulse was 160, small and thready, the respirations were 48, and the temperature was 105·8°. Her friends informed me that she became unconscious shortly after my visit on the previous day. She died about 7 A.M., 50 hours after taking the poison. The post-mortem examination was made on the following day (April 14th) at 11 A.M., 28 hours after death, when cadaveric rigidity was well marked. The external appearances were negative. The liver, kidneys, and spleen were all congested, the spleen being enlarged and weighing 15 ounces. The stomach was empty and contracted. The mucous and submucous coats were thickened and intensely inflamed, the inflamed area having almost the appearance of very dark crimson velvet. This inflammatory condition extended over the greater part of the internal surface of the viscus, the unaffected parts being the cardiac end and a band about an inch or an inch and a half wide along the greater curvature. The œsophagus also was inflamed throughout almost its entire length. The duodenum was inflamed in its entire circumference for the first three inches, and there were several erosions of the mucous membrane, but there was no perforation. The remaining portion of the duodenum and part of the jejunum were inflamed in patches which were mostly situated about the projections of the valvulæ conniventes. The remaining portions of the intestine, both small and large, were healthy. The pericardium and the heart were normal. The pleura was slightly adherent on the right side. The lower lobes of the lungs were congested and crepitated imperfectly, and on section showed dark-red colour with exudation of blood-stained frothy serum on pressure. The bronchi and larger tubes contained puriform matter. The brain and meninges were congested and the meningeal vessels were greatly engorged. There was no effusion into the ventricles.

The main feature of this case, as indicated both by the symptoms and by the post-mortem appearances, was undoubtedly to be found in the irritant action of benzine on the structures and organs with which it came in contact. The narcotic effects described in the majority of recorded cases were not manifested at all. This is probably due to the fact that in this case the emetic was administered and the stomach was evacuated before any extensive absorption had taken place, but no doubt a certain quantity of the poison entered the circulation, and its vapour would be freely inhaled at the same time, which would account for the cerebral and meningeal congestion. The embarrassed breathing and circulation and the high temperature were probably in a large measure due to the direct toxic action of the poison on the great nerve-centres.

Commercial-road East, E.

[2] Treatise on Poisons, 1844.
[3] Manual of Medical Jurisprudence, 1891.
[4] Poisons, their Effects and Detection, third edition, p. 132.
[5] THE LANCET, Sept. 28th, 1895, p. 816.
[6] Ibid., June 30th, 1894, p. 1636.
[7] Forensic Medicine and Toxicology, third edition, 1898, p. 564.
[8] Medical Chronicle, 1893.
[9] Vierteljahrschrift für Gerichtliche Medicin, 1892.
[10] Op. cit.

SWANSEA GENERAL HOSPITAL.—On May 18th the Mayor of Swansea (Mr. R. Martin) opened the Victoria Nurses' Home, erected in connexion with the Swansea General Hospital at a cost of £1800, in commemoration of the Queen's Diamond Jubilee.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

A MODIFICATION OF THE ARONSON AND PHILLIPS STAINING METHOD AND ITS APPLICATION IN THE CASE OF MALARIAL BLOOD.

BY P. N. GERRARD, M.D. DUB.,
DISTRICT SURGEON VLU SELANGOR, FEDERATED, MALAY STATES.

A SHORT description of the Aronson and Phillips staining method[1] which gives such excellent pictures of the blood may be acceptable before proceeding to any modifications. The procedure is as follows. Make concentrated aqueous solutions of orange G., acid rubin, and crystallised methyl green, leave them to settle, then mix in these proportions: orange G. 55, acid rubin 50, distilled water 100, and alcohol 50. To this add methyl green 65, distilled water 50, and alcohol 12. Leave the mixture standing for a week. A well-diluted solution should be used for staining purposes; one drop of the mixture should be added to 25 cubic centimetres of water; the stain should be left on for 24 hours and the fixing of the preparations carried out at a temperature of 120° C. In the result the red corpuscles are stained orange, nuclei greenish blue, neutrophile corpuscles violet, and eosinophile red.

My modification of the above method is simply a matter of the length of time and position on the copper slip during fixation and of the length of time on the staining fluid which I use full strength (undiluted). The metal plate which I employ is a strip of Muntz metal 3 inches by 12 inches by $\frac{1}{32}$nd of an inch, and I find the boiling-point practically constant after five minutes' heating. The method which I have worked out after repeated experiments and now generally adopt for malarial blood when permanent preparations are desired is as follows. Instead of fixing for five minutes on the slip in variable positions according to one's estimate of whereabouts a temperature of 120° C. is to be found and afterwards floating on the dilute stain for 24 hours I adopt this procedure. Having prepared the covers by the smear method as recommended by Dr. Manson (or better still by placing one cover in a Carnet forceps and laying the other bearing the droplet of blood blood-side downwards on it, then carefully and slowly drawing them apart) ascertain next at what point on the slip water constantly boils. Place the air-dried covers two inches nearer the flame than this point, blood-side up, leave them for two minutes to fix and float them on the strong solution for two minutes. The stained cover must be very thoroughly washed out in running water as the rubin in the staining fluid is very tenacious, and the washing should be continued until some part of the cover shows an orange tint when it may be dried and mounted in xylol balsam. Although parasites (crescent or others) do not stain (if they do take up any it is a very faint blue) I contend that the orange-coloured corpuscles form such a very distinct background or surrounding for them that the result is about the best that can be got, quite apart from the fact that the lymphocytes and leucocytes are brilliantly stained and the whole slide a pretty picture, exceedingly useful for demonstration purposes.

Selangor.

[1] Translation from Pathologisch-Histologische Untersuchungsmethoden, page 113. Dr. Schmorl (F. C. W. Vogel, Leipsic).

DEATHS FROM LIGHTNING STROKE.

BY HAROLD WHICHELLO, L.R.C.P. LOND., M.R.C.S. ENG.

TWO brothers, aged respectively 28 and 22 years, were driving together in a dogcart during a thunderstorm. They were apparently struck by lightning and seem to have fallen simultaneously out of the back of the vehicle, for they were found about five minutes after the flash lying side by side on the road with the seat of the dogcart under their legs and the driving apron over them. I arrived from 10 to 15 minutes afterwards and found them both quite dead; the bodies were lying in the road in the same position as they were found. The elder brother had no external sign of injury. The younger brother presented the following appearances. The epidermis was burnt over the chest and abdomen from the neck to the pubes, not continuously, but in a number of circular holes from one-sixteenth of an inch to a quarter of an inch in diameter. The metallic collar stud was fused and the skin beneath was deeply burnt. An odour of burnt flesh pervaded the whole width of the road. The back from the neck to the buttocks was burnt but less severely than in front. The vest and shirt were charred but the waistcoat and coat were uninjured. The woollen drawers and trousers had a hole burnt in them about two inches in diameter corresponding to a burn on the right buttock. On the occiput there was a contused scalp wound evidently due to the fall from the vehicle. There were no other injuries nor were any of the clothes torn off either of the bodies. Neither urine nor fæces had been voided. There was still no rigor mortis an hour and a half after death. His watch was going and seems not to have been magnetised as it has kept good time since. The cloth of the cushion on which the younger brother sat was burnt on its outer surface but the wooden seat beneath was uninjured. The tailboard of the dogcart has the paint slightly singed immediately behind the younger brother's seat, otherwise the vehicle bears no traces of the lightning. It was very wet from the rain. No one else was in the cart besides the two brothers. The horse was uninjured and trotted home of its own accord. The road also bore no traces of the lightning.

Tattenhall, Chester.

PROTRUSION OF THE INTESTINES IN A NEW-BORN INFANT.

BY JOHN BELL, L.R.C.P. LOND., M.R.C.S. ENG.,
ASSISTANT SUPERINTENDENT, GOVERNMENT CIVIL HOSPITAL, HONG-KONG.

THE following case presents some points of interest. On April 8th at 9 A.M. a Chinese female child was brought to hospital immediately after birth. On removing the filthy wrappings the cord with placenta attached and about two feet of intestine were found lying on the abdomen. On examination it was seen that the cord about two inches from the umbilicus was thinned out and attached all round an opening into the abdomen about one and a half inches in diameter through which the intestines had escaped. The child was crying a little but did not seem in much pain nor was it collapsed. The intestines were cleaned and after some trouble were returned, a ligature of silk was slipped round the opening and tied, and the cord was then dissected off. At 6 P.M. this ligature unfortunately slipped and the intestines had again to be returned. Three deep and three superficial silk sutures were now inserted. The child throughout took milk well though occasionally there was some vomiting. The stitches were removed on the sixth day and the child was discharged quite well on the twentieth day, the superficial part of the wound taking some time to heal. The highest temperature throughout was 99·6° F. on the third day. The condition must, I think, be a rare one, as no one here had ever seen or heard of a similar case. The absence of peritonitis throughout is also somewhat remarkable.

Hong-Kong.

MEDICAL MAGISTRATES.—Mr. William H. Lang, M.B. Edin., has been appointed, *pro tem.*, Deputy Licensing Magistrate of the Licensing Court for the Licensing District of Corowa, New South Wales, and Mr. L. Robinson, M.D. R.U.I., has been appointed a Justice of the Peace for Queensland.

VACCINATION FEES.—At a meeting of the Thornbury Board of Guardians held on May 26th a communication was read from two of the medical officers asking that the vaccination fees might be on a higher scale than those fixed by the Local Government Board. The majority of the guardians were of opinion that they had acted fairly to the medical officers by fixing the fees above the minimum laid down by the Act, and as these officers had appealed to the Local Government Board it was decided that the fees should therefore remain the same as suggested by the Local Government Board.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. BARTHOLOMEW'S HOSPITAL.

A CASE OF DIABETES WITH RECOVERY IN A FAT MAN WITH A FAMILY HISTORY OF DIABETES.

(Under the care of Dr. SAMUEL WEST.)

THE family history of diabetes in the following case is extremely strong and by itself would have justified a very unfavourable prognosis, but the ready response made by the glycosuria to the dieting was of much happier augury. The permanent absence of sugar from the urine, even after a resumption of food containing carbohydrates, is striking and decidedly rare. A very similar case is recorded by the late Sir W. Roberts. It may be said that if dieting is going to benefit a case greatly the effect will be manifest very rapidly and this point is well illustrated in Dr. West's case.

A man, aged 47 years, came under observation with the history that he had been three weeks ill with considerable thirst and frequent micturition; he had lost 18 lb. in weight in the previous 18 months. The patient was a big man of a florid complexion and weighed 15 st. 6 lb. The urine was of specific gravity 1030 and contained a trace of albumin and a large amount of sugar, about 8 per cent. The patient was given instructions as to his diet and was placed upon a mixture containing cinchona and acid. Three weeks later the sugar had fallen to 2 per cent. and the patient had lost his thirst and was feeling very much better. A week after that no trace of sugar was found in the urine at all. A month later he was allowed to take a small quantity of bread and this caused the return of sugar, but not to any large amount. He continued, however, to eat bread and the sugar gradually disappeared. Two months later, probably in connexion with some error in diet (for he had been eating largely of potatoes), on examination of the urine a fair amount of sugar was found, the specific gravity being 1024. His weight was about the same as it was when he first came under observation; but he looked quite well and had lost all his symptoms. From this time the urine has been examined on many occasions and found to be completely free from sugar, the specific gravity being about 1018 or 1020. The patient ate no sugar but took bread freely and occasionally potatoes, but otherwise kept as clear as he could of starchy food.

A year after first coming under treatment, having been under observation during the whole of the time and no sugar having been found since the last statement, he gave the following account of his usual diet. He ate half a pound of meat pudding each day, about one pound of potatoes, and a half-quartern loaf of white bread; he drank about an ounce and a half of Scotch whisky daily and about three pints of tea, took a small quantity of butter, but otherwise never ate anything which tasted sweet and took no beer or wine. He was then advised, in order to test his capacity, to eat sugar and that he did, but it had no effect upon his urine. Since that time to the present (May, 1899, nearly two years) he has lived upon ordinary diet without any restriction; his weight remains the same and he is perfectly well. The urine has been frequently examined and it has never been found to contain any sugar.

Remarks by Dr. WEST.—This case may be regarded then as one of complete recovery. Interesting as the case is in itself it is still more interesting on account of the family history. The patient stated that his mother died at the age of 70 years from diabetes and that a sister died at the age of 30 years also from diabetes, while a half-sister on his mother's side died at the age of 48 years from the same disease.

ROYAL INFIRMARY, LIVERPOOL.

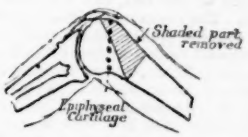
FOUR CASES OF BONE SURGERY.

(Under the care of Mr. W. THELWALL THOMAS.)

ALL the following four cases are of interest but probably the second and the fourth are the most important. In the second case the disability resulting from double ankylosis of the hips is well shown, though this patient could move the right hip-joint to a slight extent. The additional trouble which arises from adduction of the ankylosed limbs is also noteworthy and by the removal of this element of the deformity great improvement resulted in the patient's walking powers. We entirely agree with Mr. Thelwall Thomas in thinking that any attempt at making a false joint after osteotomy of the femur is certain to end in failure. In the fourth case the resection of the fibula allowed the two ends of the tibia to be placed together so that many months were saved in the healing of this injured bone at the expense of a comparatively slight shortening. In the third case the impaction of the fracture of the femur is certainly very rare.

CASE 1. *Bony ankylosis of the knee-joint in a faulty position; removal of a wedge from the femur; cure.*—A boy, aged 15 years, was sent to the Royal Infirmary, Liverpool, by Mr. Wilding of Hindley. In 1887 the patient fell on a clog knife which cut into the knee-joint. The joint suppurated and he was laid up for many weeks, during which time the knee became flexed and bonily ankylosed at an angle of 100° (Fig. 1). He was admitted into the infirmary

FIG. 1.

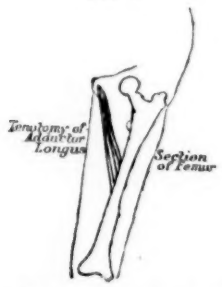


on Sept. 25th, 1894, for surgical treatment on account of the serious impediment which such a deformity proved to be. The patient being a growing youth the operation was so planned as to avoid the epiphyseal cartilages. A V-shaped piece was removed from the femur of sufficient size to allow of straightening the limb; this necessitated a slight encroachment on the epiphysis at the anterior extremity only (Fig. 1). A buried silver-wire suture was used at the outer side of the femur owing to the inequality of the cut surfaces and the limb was put up in a Thomas's knee-splint, cyanide gauze dressings being used under a pad of wood-wool tissue. The wound healed by first intention without febrile disturbance and on Oct. 29th the patient was allowed up, in a well-fitting Thomas's calliper splint, in which he went home on Nov. 6th, there being firm bony union. In January, 1895, he exhibited a firm knee, with which he walked well, but there were two and a quarter inches of shortening of the left lower extremity, some of which was no doubt due to a want of development of the limb during the seven years in which there was ankylosis in a faulty position.

CASE 2. *Ankylosis of both hip-joints, being fibrous in the right joint and bony in the left joint; osteotomy of the femur and tenotomy of the adductor longus.*—A girl, aged 13 years, suffered from double hip-joint disease of the non-suppurative variety when three years old and wore Thomas's double hip splint for years. The joints stiffened and when the splint was removed she could only feebly shuffle along. When she was admitted into the infirmary there was found to be slight movement in the right hip-joint which was limited in all directions apparently by fibrous adhesions. The left hip-joint was immoveably ankylosed and no amount of strain on the leg caused the slightest discomfort. Evidently the bones were fused together. There was marked internal rotation of this thigh with adduction and it was only by abducting the right lower limb that the legs did not cross and produce the "scissor-leg" deformity. When the pelvis was placed level the left leg crossed the right and the girl had to be supported lest she fell. There was no pain in the joints, but she was so crippled that her snail-like pace only allowed her to "walk" one and a half miles in four hours. The left heel was raised off the ground and she had marked flat-foot. The ankles could only be separated three inches. In February, 1895,

it was resolved to perform osteotomy on the left femur and rotate the thigh outwards, separating at the same time the knees from their close relationship. An incision was made down the front border of the great trochanter for two inches and with an Adam's saw section was made across the bone just above the lesser trochanter. On snapping the bone it was found that a contracted adductor longus prevented abduction, so tenotomy was performed (Fig. 2). Knowing the unsatisfactory and transitory

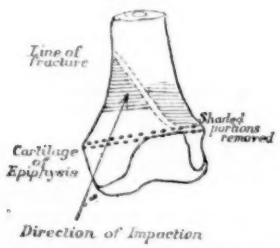
FIG. 2.



nature of a so-called false joint, no attempt was made to remove any bone, so the limb was placed on a Thomas's knee-splint, with an outerside Cline's splint lashed to the two curved cross-bars so as to continue the apparatus down on the outer side to the foot, and the foot was thus kept slightly everted. The knees were thus separated six inches. A dressing of cyanide gauze under wood-wool tissue was applied. The wound healed by first intention, the temperature never rose above 99° F., and at the end of six weeks the patient was allowed to be up with a poroplastic casing partially encircling the pelvis and thigh. She soon began to walk about the ward, the left boot was altered by filling up the instep to correct the flat-foot, and in a little time she was able to walk fairly well—in fact, in three weeks she was discharged from the infirmary and walked two miles in an hour, her ankles being eight and a half inches apart.

CASE 3. *Fracture of the left femur (lower end) with impaction at an angle of 120° irreducible under chloroform; operation; cure.*—A boy, aged 15 years, while standing beneath a hoist was struck by a falling sack of corn which grazed his shoulder and fell with its full weight on his left knee as he was endeavouring to escape. His knee became bent and it could not be straightened. Dr. Molyneux of Garston was sent for. Chloroform was administered, but reduction was

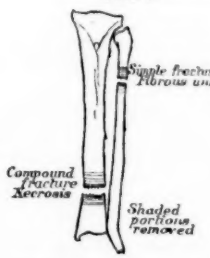
FIG. 3.



impossible. This was on March 24th, 1894. The patient was sent at once to the infirmary, where reduction was again tried under chloroform by the house surgeon and by myself but without success. Owing to the extensive bruising of the skin and ecchymosis beneath it was deemed prudent to await the result to the skin before operating and as a precaution the part was carefully treated antiseptically and dressed with cyanide gauze and the limb was placed on a double inclined plane. During the examination it was discovered that the fracture went partially through the epiphysis and splintered the femur and that the sharp fragment of the lower end had been jammed into the shaft of the femur. A superficial slough separated and then the following operation was performed on June 2nd, 1894. An incision four inches in length was made along the outer side of the femur and the pointed upper fragment was exposed and chiseled off. The pointed lower piece was then cut through and the sharp end was removed. Reduction was then easy (Fig. 3). A Thomas's knee splint was applied. The wound healed and the patient was discharged from the infirmary six weeks after the operation with firm bony union. Six months afterwards there were nearly three inches of shortening, but he walked very well and he could flex the knee to a right angle. The fracture involved the epiphysis and hence the large amount of shortening.

CASE 4. *Compound fracture of the tibia and simple fracture of the fibula; operation; cure.*—A man, aged 50 years, was knocked off a railway waggon on Oct. 26th, 1892, and sustained a compound fracture of the left tibia in its lower third and a simple fracture of the fibula of the same leg in its upper third. Five months afterwards he was admitted into the infirmary on account of non-union and necrosis of the tibia. The discharge was putrid and the prominences of the leg and heel had pressure sores which contributed to the stench. Under chloroform the limb was thoroughly cleansed and a Cline's splint with a foot-piece (out of which several pieces had been cut with a knife to avoid the sores) was applied. At the end of a fortnight it was decided to operate. On April 2nd the ends of the fracture of the tibia were more freely exposed and about three quarters of an inch was

FIG. 4.



removed from each, leaving a clean healthy surface of bone. On account of the length of the fibula (which had united by fibrous tissue) the ends of the tibia could not be brought together, so a fresh incision on the outer side of the leg was made exposing the fibula at its point of fracture and sufficient bone was removed to allow the tibia fragments to be easily brought together (Fig. 4). Silver wires were passed through the bones and a back iron splint and two side splints were applied, the dressings being cyanide gauze under wood-wool tissue. Recovery was slow. A small exfoliation of bone from the tibia took place, but in a few months union occurred, the limb was placed in plaster-of-Paris, and the patient was discharged from the infirmary. He was soon able to do some light work and has been earning his living ever since as a gateman at a level crossing.

Medical Societies.

CLINICAL SOCIETY OF LONDON.

Acute Intestinal Obstruction.—Hæmorrhagic Erythema in Bright's Disease.—Excision of Subclavian Aneurysm.—Annual General Meeting.

A MEETING of this society was held on May 26th, the President, Mr. LANGTON, being in the chair.

Mr. H. BETHAM ROBINSON described a case of Acute Intestinal Obstruction caused by an adherent vermiform appendix forming a band associated with fœtal arrangement of the peritoneum. A female child, aged seven years, was admitted into St. Thomas's Hospital in March, 1898, with a history of constipation which had lasted for a week and occasional attacks of vomiting now becoming constant and dark-brown in colour. She had a pinched appearance; the pulse was 110, respirations were 38 per minute, and the temperature was 96·8° F., but there

was not any marked collapse. There was acute pain in the abdomen about the umbilicus. The abdomen moved with respiration and was not rigid. Distension was particularly noticeable in the middle line above the umbilicus and coils of small bowel were distinctly defined. There was comparative dulness on the left side. There had been no rectal discharge and no lump was to be felt there. It was doubtful whether the patient had passed flatus for the last few days. The abdomen was opened in the middle line and a quantity of fluid with a few lymph coagula escaped. The small intestine was so extremely distended that exploration was impossible until the intestine was tapped and three pints of fluid had been removed. In the right flank there was no colon and on the left side the colon was absolutely collapsed, which condition was traced along the transverse colon. To the left of the mid-line above the umbilicus a mass was felt which proved on examination to be a loop of small intestine close to the cæcum strangulated under a band formed by the tip of the vermiform appendix being adherent to a caseous mesenteric gland. Beyond the obstruction the intestine was completely compressed, whereas the small intestine on the proximal side was very dilated. The cæcum and the whole of the ascending colon retained their primitive peritoneal investment, so that they could, and had, passed freely over to the left side. The appendix was separated and the intestine was released. The child's condition was so bad as to require infusion. She did not rally at all after the operation and died very shortly afterwards. At the necropsy it was found that not only were the ascending colon and cæcum freely moveable but the third part of the duodenum had a mesentery.—Dr. FRANCIS HAWKINS asked whether the adhesion of the appendix might not possibly have been caused by a previous attack of appendicitis.—Mr. ROBINSON, in reply, said that this was unlikely, as there was not the least indication of appendicitis and the presence of the caseous mesenteric gland which he had mentioned amply accounted for the adhesion.

Dr. COLCOTT FOX related an instance of Hæmorrhagic Erythema in a case of Bright's Disease and showed drawings of a woman, aged 61 years, who had suffered from bronchitis and acute nephritis probably supervening on old mischief. She left an infirmary but returned a fortnight later (Jan. 5th) with injected and swollen fauces, some erythematous maculæ on the face, and a few petechiæ on the legs. On Jan. 10th a generalised eruption made its appearance. It was of an erythematous macular type slightly raised with a tendency to rapid centrifugal extension. The eruption varied in size from that of a pin-point to that of a finger-nail, but tended to become confluent, forming patches and sheets. The colour was a vivid red, ineffaceable by pressure. The smaller lesions were dotted with distinct hæmorrhagic puncta and the large older ones acquired a well-defined purple border enclosing bluish-red centres. The palms and soles were diffusely involved but the fingers and dorsal surfaces were at first unaffected. The skin of the fingers, wrists, toes, and feet were œdematous. The joints of the wrists and hands were tender and painful. By Jan. 12th the eruption had become almost universal and looked at first glance like severe purpura. Over the abdomen the maculæ were mostly small and erythematous and not nearly as hæmorrhagic as elsewhere. The face was sallow and the forehead was covered with a morbilliform eruption. The lips were swollen and blood-stained and there were a few purpuric spots on the gums and palate. After a brief pause the lesions became increasingly hæmorrhagic and even more confluent. On the 15th a recent retinal hæmorrhage was detected. On the 16th melæna occurred and the patient died on the 17th. Before death the hæmorrhage was still increasing in the skin. Post mortem a good deal of congestion of the lungs was seen, with intense injection of the mucous membrane of the trachea, bronchi, stomach, colon, and especially of the jejunum and ileum, where it was hæmorrhagic. There was no endocarditis. The kidneys were small, red, and granular, with a narrow cortex and adherent capsule. Microscopical examination of the affected portions of skin revealed distension of the lymph spaces and the blood-vessels of the papillary layer with a moderate cell infiltration. The sheaths of the larger horizontal vessels were, however, densely infiltrated with cells. There was apparently no plugging of the vessels and no micro-organisms were discovered. Dr. Fox observed that the eruption appeared to correspond clinically with the roseola of Willan rather than with erythema multiforme. He said that observers were familiar with cutaneous hæmorrhage as a complication, or even in lieu, of the characteristic eruption of infective diseases such as variola and measles and it was equally recognised that in erythema multiforme there was a special tendency to the exudation of blood-stained fluid, and even blood itself, which might completely mask the essential eruption. Hæmorrhage into the slighter roseolar forms of eruption was, however, rare. He added that in his experience the appearance of this kind of eruption in patients suffering from Bright's disease usually heralded approaching dissolution. They had been of two types—either of the roseolar type of Willan or of the morbilliform type. He mentioned the case of a woman who two or three days before her death from granular kidney became covered with a copious eruption of dusky erythematous maculæ of the size of the finger-nail, closely simulating the roseolar syphilide. He had also seen several examples of a copious generalised morbilliform eruption terminating in profuse desquamation.—The PRESIDENT said that the case which had been related would be a valuable addition to the cases of skin affection in Bright's disease brought before the society earlier in the session by Dr. Samuel West.

Mr. H. ALLINGHAM showed a case of Aneurysm of the Subclavian Artery which had been treated by ligature of the first portion followed in 38 days by removal of the aneurysm. The case is published in full on page 1487. The patient was admitted to St. George's Hospital on Feb. 20th, 1899, exhibiting a pulsating expansile swelling in the right supra-clavicular region. Mr. Allingham ligatured the subclavian artery on the cardiac side of the tumour. Recovery was complete, no pulsation being perceptible in the tumour or in the radial artery until March 4th, when some slight beating was detected in the aneurysm. On March 28th it was noted that the aneurysm was increasing in an upward direction and that there was decided palpable and visible pulsation. On April 8th the whole length of the clavicle was exposed and the greater part removed. The patient rapidly recovered, and was now about, using his right arm with comfort. Section of the aneurysm showed that its cavity was largely occupied by firm clot, the blood passing into it from the subclavian and out posteriorly by what appeared to be the profunda cervicis.—Mr. STANLEY BOYD congratulated Mr. Allingham on his success. The return of pulsation so soon after ligature of the first part of the artery was of interest. It appeared to be frequent after proximal ligature for aneurysm of the third part of the subclavian artery and this was a strong argument in favour of excising the sac. If the aneurysm were freely exposed it ought to be as easy to put a ligature round the artery at the first as later and it had been done in at least three instances. It would be interesting to note whether the shoulder drooped after a time, but at present there was hardly any drooping. The subclavian artery had been said to be the thinnest artery in the body and this might possibly be the reason why hæmorrhage was so common after ligature of the first part. In any case one of the great difficulties of the operation was to arrange the artery comfortably after ligature.—Sir DYCE DUCKWORTH said that at the present time he had a patient under his care suffering from an aneurysm of the subclavian artery. Mr. Howard Marsh had seen the patient and was of opinion that it would be a suitable case for this operation, but under treatment by rest, restricted diet, and large doses of iodide of potassium the aneurysm was consolidating and shrinking, so that it had been decided not to interfere at present.—Mr. CHARTERS SYMONDS mentioned a case of aneurysm of the second portion of the subclavian artery in which he had tried to ligature the first part. The whole posterior triangle was filled with a pulsating swelling which extended up to the sterno-mastoid. He was proceeding to apply a ligature to the first part by the method suggested by Ballance and Edmunds, but on exposing the artery by splitting the sterno-mastoid and passing a needle from below there was a furious rush of blood which ceased on withdrawing the needle but recurred when it was reintroduced. Mr. Symonds therefore ligatured the innominate and common carotid on that side simultaneously and so far the patient had done well. He asked whether Mr. Allingham had divided the head of the sterno-mastoid muscle.—The PRESIDENT said that although he himself had never had occasion to ligature the first part of the subclavian for aneurysm he had met with two cases in which there was a large malignant mass involving the centre of the clavicle

which necessitated the removal of the greater part of that bone. In both cases an excellent result had been obtained with little impairment of the use of the limb. If, therefore, it was found desirable to remove that bone to obtain free access to the artery it might be done without hesitation.—Mr. ALLINGHAM, in reply, said that he had freely divided the sterno-mastoid an inch above the clavicle, exposing the inner border of the scalenus anticus where the artery was found pulsating and ligature could readily be passed round it. He had used kangaroo tendon for the first operation in deference to the advice of his colleagues, but at the second he employed sterilised silk which was the ligature which he habitually employed. Before operating he had considered the question of removing the clavicle but was unable then to obtain any information on the subject.

Subsequently the annual general meeting was held. The report of the Council showed that the financial position was satisfactory and that there had been very large attendances at the meetings, especially at those devoted to demonstration of living cases. Hearty votes of thanks were given to the retiring President, Mr. Langton, the retiring honorary secretary, Dr. Kingston Fowler, and other officers. The following gentlemen were elected to hold office during the session 1899-1900:—President: Sir Richard Douglas Powell, Bart., M.D. Lond. Vice-Presidents: Dr. Sidney Coupland, Dr. James Frederic Goodhart, Dr. Leonard William Sedgwick, Mr. A. Pearce Gould, Mr. John Hammond Morgan, and Mr. Herbert W. Page. Treasurer: Mr. F. Howard Marsh. Council: Dr. Arthur T. Davies, Dr. J. Kingston Fowler, Dr. Archibald E. Garrod, Dr. W. Julius Mickle, Dr. J. A. Ormerod, Dr. J. F. Payne, Dr. J. J. Pringle, Dr. H. D. Rolleston, Dr. Harrington Sainsbury, Dr. R. Percy Smith, Dr. J. C. Uhthoff, Mr. W. H. Battle, Mr. James Berry, Mr. Stanley Boyd, Mr. L. A. Dunn, Mr. F. S. Eve, Mr. Stephen Paget, Mr. G. H. Makins, Mr. T. Pridgin Teale, and Mr. G. R. Turner. Honorary secretaries: Mr. Charters J. Symonds and Dr. Percy Kidd.

HARVEIAN SOCIETY OF LONDON.

The Etiology and Significance of Dilated Heart.—Exhibition of Microscopic Specimens.

A MEETING of this society was held on May 18th, Mr. H. E. JULER being in the chair.

Dr. H. A. CALEY read a paper on Considerations as to the Etiology and Significance of Dilated Heart, which is published at p. 1483 of our present issue.

Dr. ALEXANDER MORISON considered that the simplest method of regarding the etiological factors in the production of cardiac dilatation was to remember the essential triunity of the so-called functional unit and to refrain from dissociating the muscular, hæmic, and neural elements of which it was composed. He protested against the tendency of many physiologists at the present day to regard the muscular element as the predominant factor in sustained rhythmical action, and considered that both clinical experience and pathological investigation, rudimentary though the latter still was, pointed to the important rôle played by the nervous system in such cases.

Dr. JOHN BROADBENT said that the question as to what were the factors which determined the relative amount of dilatation and hypertrophy after endocarditis was one of great importance. He considered that the myocarditis which so frequently accompanied endocarditis and not the actual lesion of the valves was responsible for the initial dilatation from which the heart might entirely or only partially recover. Subsequently, as the valves in the process of repair became puckered and deformed by cicatricial contraction of the granulation tissue on their surface the effects of the valvular lesion became pronounced and led to fresh dilatation of the heart followed by hypertrophy which constituted a measure for estimating the extent of the valvular lesion. It was important, therefore, not only to enjoin absolute rest after an attack when the heart was recovering from the initial dilatation due to accompanying myocarditis, but subsequently to insist on great care and moderation in exercise at a later period when compensatory changes called forth by the valvular lesion were taking place. Otherwise undue and permanent dilatation with excessive hypertrophy might ensue.

Dr. G. A. SUTHERLAND asked whether dilatation was ever present without hypertrophy. Dilatation must be either an active or a passive process as regards the cardiac muscle. A passive dilatation in cardiac failure implied that the blood could be pumped through the arterial and venous systems by the left ventricle in a weakened condition and yet remain under sufficient pressure to dilate the ventricle. It was difficult to accept such an explanation on physical grounds, as venous engorgement and cardiac syncope would appear to be a more likely result. Active dilatation, on the other hand, might be the calling into play of some reserve power in the heart which by greater expansion and more rapid action was enabled to carry on the circulation. As compensation was often fully established under these conditions he thought that dilatation might be looked upon as a conservative process and one not necessarily to be interfered with medicinally or otherwise, although it was recognised that over-action of the heart was present and that a breakdown must occur in the course of time.

Dr. POYNTON agreed with Dr. Sutherland as to the difficulty in many cases of explaining dilatation of the heart upon mechanical considerations. In rheumatism dilatation might be very marked and the clinical symptoms comparatively slight, whereas in other conditions the clinical symptoms might be very severe and the dilatation slight. Microscopic examination of the heart walls sometimes showed extensive myocardial disease with little dilatation and sometimes the reverse. In rheumatism he thought it probable (a view also held by Dr. Lees) that the marked dilatation was explained by a special and peculiar action of the rheumatic toxin upon the cardiac muscle. The difficulty and complexity of these questions of cardiac dilatation were illustrated by the case of a young man, aged about 24 years, who having been "out of sorts" for some days went for the first row of the season in a "four oar" to "shake it off." On landing after this exertion he vomited and later in the day was seen by a medical man who found that his heart was extremely rapid, the pulse-rate being about 200 to the minute. He was admitted under the care of Dr. Cheadle to St. Mary's Hospital in this condition and he died two or three days afterwards, the heart acting to the end at this extraordinary rate. The post-mortem examination showed some mitral valvulitis and old pericarditis, but the dilatation was quite moderate. In this case there were two factors—a damaged heart and the mechanical strain, both, one would have thought, tending to produce great dilatation rather than a condition of tachycardia with little dilatation. He thought it was important to get a definite idea of the meaning of fibrous changes in the heart wall. Sometimes they were brought forward to account for dilatation and sometimes they were given as an explanation of its absence. These fibrous changes which arose in connexion with the vessels were essentially reparative, he thought, and an evidence of nature's reaction, however imperfect, to morbid processes. The valve deformities in rheumatism were thus an evidence of reaction to the toxic process rather than an evidence of the active effects of the toxæmia.

Dr. BEZLY THORNE was glad to find so much importance attached to the first stages of dilatation, because by their early recognition and relief the physiological call for hypertrophy and the ultimate sequelæ of degeneration and loss of compensation could in a large number of cases be obviated. With regard to tobacco poisoning the practice of inhalation was the most certain and rapid in evil effect. Abnormal sexual excesses were the cause of cardiac dilatation in other cases and some of these were the most obstinate. He added that myocardial and vascular degenerations which had not proceeded to calcification, and especially those which were attributable to atheroma and fatty degeneration, were among the most amenable to treatment of cardio-vascular affections. The free ingestion of water, at such times as not to interfere with gastric digestion, by promoting elimination of toxins was an effectual means of reducing vascular tension in cases in which sclerotic changes had not rendered increase of arterial lumen impossible, not excepting cases of commencing dilatation of the aorta.

Dr. H. A. CALEY, in reply, remarked that practically they could only estimate alterations in the cardiac nervous mechanism by noting any alteration in the frequency and rhythm of the heart-beat and by estimating as far as possible the amount of contractile vigour which the heart muscle possessed. In reply to the question as to whether slight degrees of dilatation might not be beneficial he pointed out that just as a slight degree of dilatation under physiological conditions might be a mechanical advantage, so a corresponding degree of dilatation under pathological

conditions might likewise be advantageous, provided that it was accompanied by sufficient vigour of the heart muscle with or without actual hypertrophy. This had been referred to in the paper as strictly compensatory dilatation.

Dr. POYNTON exhibited microscopic specimens illustrating various Diseased Conditions of the Myocardium. The sections were taken through the left ventricle, the papillary muscles, and (in one case) the aorta. They showed the general fatty changes which might occur in severe and rheumatic morbus cordis, the extreme myocardial disease which might occur in some cases of alcoholism, and the severe and active changes which might be found in the heart wall in acute aortitis without demonstrable affection of the coronary vessels. The explanation of the condition in these cases of aortitis was in all probability that a process analogous to that in the aorta had taken place in the heart wall itself. He thanked the society for their permission to show the microscopic specimens.

PATHOLOGICAL SOCIETY OF MANCHESTER.

Exhibition of Specimens.

A MEETING of this society was held on May 10th, Dr R. B. WILD, the President, being in the chair.

Dr. THOMAS HARRIS exhibited a specimen of Indurative Mediastino-Pericarditis from a case where during life there had been a pulsus paradoxus which was marked in the arteries of the left arm only. The pericardium was totally adherent and there was a marked increase of the fibrous tissue in the mediastinum with matting of the various structures there and firm pleuritic adhesions. There was no evidence that the adhesions were such that during inspiration the left subclavian would be more dragged upon than the right subclavian or innominate artery. It was considered, however, that the most probable explanation of the unilateral pulsus paradoxus lay in the greater length and the narrow lumen of the left subclavian artery as compared with the length and lumen of the innominate artery; that adhesions in the mediastinum would be likely to have a greater effect during inspiration on the narrow subclavian artery and would be more likely to cause a kinking of that vessel than would adhesions between the chest-wall and the innominate artery.

Dr. ARNOLD W. W. LEA showed a specimen with microscopic section from a case of Sarcoma of the Sigmoid Flexure occurring in a child, aged three years. The growth had caused no symptoms until 10 days before death. Acute peritonitis suddenly developed with the formation of a localised intra-peritoneal abscess. The abdomen was opened and the pus was evacuated. Extensive growth was found in the region of the sigmoid flexure and the finger readily entered a large perforation of the bowel in the centre of the mass. The child died two days later. Post mortem the abscess was strictly localised by adhesions. There was no general peritonitis. The growth was diffuse and polypoid, involving four inches of the bowel. There was no evidence of obstruction. The glands in the meso-sigmoid were much enlarged. There were secondary growths in the liver. The other organs were normal. On section the growths were found to be composed of small round cells. Primary sarcoma of the bowel was exceedingly rare and from the few published cases appeared to be usually of the spindle-celled variety.

Dr. WYLIE showed a Congenital Abdominal Tumour removed by operation from the Lesser Peritoneal Cavity of a child, aged five months. It consisted in part of imperfectly developed viscera and two limb-buds projected from the tumour mass.

Dr. FOTHERGILL showed a Fœtus and Cord in which through unusual persistence of the umbilical vesicle that structure was peculiarly well seen. By means of microscopic sections he demonstrated within the fœtus and in the cord the stalks of the allantois and umbilical vesicle and pointed out the way in which slight abnormalities in the involution of these stalks produce various lesions, such as patent urachus, dilated urachus, Meckel's diverticulum, and fæcal umbilical fistula. Intussusception and volvulus were said to be secondary occasionally to persistence of the stalk of the umbilical vesicle, and in the discussion it appeared that several members had seen cases of fatal intestinal obstruction caused by a fibrinous band stretching from the umbilicus to a Meckel's diverticulum and representing the same structure.

The following card specimens were exhibited:—

Dr. F. W. EURICH: (1) An Angio-sarcoma of the Sternum; and (2) a Carcinoma of the Heart secondary to a growth of the diaphragmatic pleura.

Dr. E. S. YONGE: A Hypertrophied Tonsil with Papillomatous Outgrowths.

Mr. E. STANMORE BISHOP: (1) A Pyosalpinx; and (2) a Suppurating Fibroid.

Dr. A. W. W. LEA: An Abscess of the Ovary with Chronic Hæmorrhagic Salpingitis.

Dr. F. R. MALLETT: A Vesical Calculus, weighing 12¼ ounces, removed by suprapubic cystotomy.

Mr. W. P. MONTGOMERY: A Strangulated Hernia with Perforation of the Small Intestine.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF PATHOLOGY.

Pathological Clavicles.— Infective Endocarditis.— Dislocations of the Metatarsus.—Central Sarcoma of Bone.— Exhibition of Specimens.

A MEETING of this section was held on May 5th, Dr. J. M. PURSER, the President, being in the chair.

Dr. KNOTT exhibited a large series of Pathological Clavicles.—Professor E. H. BENNETT said that the two specimens of Fracture of the Sternal End of the Clavicle were very rare. They were of exactly the same type as he had himself obtained—namely, an oblique fracture passing through the sternal end and produced by a force acting in the axis of a clavicle.—Mr. R. C. B. MAUNSELL remarked that he had a patient who sustained a fracture of the clavicle and a false joint was the result owing to non-union.—Dr. KNOTT, in reply, said that he had never seen an ununited fracture of the clavicle.

Professor E. J. MCWEENEY described a case of Infective Endocarditis due to the Pneumococcus. Into the left auricle projected a greyish friable mass of fibrinous material as big as a large hazel nut and springing from the aortic cusp of the mitral. The chordæ tendineæ were involved in a mass of similar character and were much softened and ulcerated. Microscopically and culturally the diplococcus of Fraenkel was the only organism found. The edges of the fibrinous mass contained it in prodigious numbers, aggregated in small circular colonies. Both kidneys were found to be extensively infarcted, but the spleen was not. Two months previously the patient had developed a slight consolidation of the bases of both lungs, consequent on a laparotomy successfully performed for the relief of pyloric obstruction. The temperature had been elevated at that time for two days only and the case was regarded as one of so-called "ether pneumonia." She was discharged cured of her gastric trouble and was readmitted a month afterwards with the symptoms of ulcerative endocarditis. Attention was drawn to the facts (1) that cases of so-called ether pneumonia may be due to pneumococcus infection and (2) that pneumococcus infection of the lungs spreads more often than is generally supposed to the general circulation, giving rise to ulcerative endocarditis. This was the second case of the kind which he had shown within the last five months to that section. In the previous case the heart affection had supervened on the pneumonia nine days after an imperfect crisis and the blood withdrawn during life was proved culturally to contain the pneumococcus, whilst abundant colonies were obtained post mortem from the clot in the right auricle.

Professor BENNETT described two cases of Dislocation of the Metatarsus on the Tarsus. One was a complete dislocation of the bases of the metatarsals upwards and outwards; the second was an example of dislocation of the first, second, and third metatarsals downwards beneath the tarsus. Of this he exhibited a cast and of the former a skiagram showing that the dislocation had occurred without fracture of the base of the second metatarsal.

Mr. W. J. DE COURCY WHEELER read a paper on Central Sarcoma of Bone.—Professor MCWEENEY said that the two microscopical sections which he had prepared for Mr. Wheeler showed an enormous number of giant cells or myeloplaxes. The tissue resembled normal bone

marrow, with an extreme multiplication of the myeloplaxes. The cells were of positively gigantic proportions and some possessed about 100 nuclei. Mr. Wheeler's suggestion that such tumours should be removed out of the class of sarcoma and called "myelomata" was impossible, because the term "myeloma" was already appropriated to a kind of tumour which was not identical with that described by Mr. Wheeler. Weichselbaum's book described myeloma as a variety of small round-celled tumours growing from the marrow of bones, but not reproducing the giant-celled structure of marrow.

Mr. R. C. B. MAUNSELL showed two specimens of Vascular Tumours of the Abdominal Wall which had been successfully removed by operation. The first was removed from the left lumbar region of a woman, aged 22 years, and had been gradually growing from early childhood. It was as large as an adult hand and on examination it proved to be formed of dilated lymphatic spaces and to be of the same character as the congenital cystic hygromata of the neck. The second was removed from a child, 11 months old, and it proved to be a venous nævus. It had been noticed shortly after birth when it was not bigger than the head of a pin and had rapidly grown until it measured 16½ by 11½ centimetres and covered fully a third of the child's abdomen. It was ulcerated and blood was constantly oozing from it.

Mr. P. J. FAGAN showed specimens of various Pathological Conditions of the Tunica Vaginalis Testis.—The microscopic characters were described by Professor MCWEENEY who pointed out how very interesting it was to see a typical papillomatous carcinoma originating from an endothelial membrane like the tunica vaginalis.

MANCHESTER THERAPEUTICAL SOCIETY. — A meeting of this society was held on May 24th, Dr. D. J. Leech, President, being in the chair.—Dr. R. T. Williamson made a communication on the subject of the Palliative Treatment of Paralysis Agitans. He pointed out that frequently patients suffering from paralysis agitans were under observation only a comparatively short time, so that it was difficult to form an opinion of the action of drugs. At present all that could be done in the way of treatment was to make the patient's life more tolerable. The tremblings and the constant restlessness of the muscles were very troublesome to the sufferer who was often tempted to think that death would be a release. Something, however, could be done to relieve these symptoms and to improve the patient's condition. It was of the greatest importance to secure sound sleep, as a restless night was quite sufficient to make the symptoms worse on the following day. Sulphonal, or whisky and hot water, at bedtime were often useful in this connexion. The bed should not be too soft. Though whisky at bedtime helped to procure sleep and did good, alcohol taken during the day seemed to increase the tremblings; strong tea and coffee were said to have the same effect. Needlework and writing often seemed to diminish the tremblings. Holding the arms above the head for some time might also cause the tremblings to cease for awhile. A warm bath had often a good effect. The patient's living-room should be well ventilated and not too warm. Systematic open-air treatment was valuable, carriage drives were very advantageous, and railway journeys were often beneficial. Dr. Williamson had tried strychnine, arsenic, iodide and bromide of potassium, calabar bean, gelsemium, cannabin tannate, &c., without any good result. Morphine hypodermically certainly gave relief, but this treatment was very objectionable in a disease of such a chronic course; morphine or duboisine by the mouth seemed to have little effect. Hyoscine was the only drug which Dr. Williamson had found really useful and he felt certain of its power to relieve many of the troublesome symptoms of paralysis agitans. He gave it at first in pill form in doses of from $\frac{1}{300}$th to $\frac{1}{100}$th grain, but found these small doses useless. He now prescribed one-quarter grain of hyoscine in six ounces of chloroform water, the dose of the mixture being two teaspoonfuls, corresponding to $\frac{1}{96}$th grain of hyoscine hydrobromate. The dose might be increased to $\frac{1}{75}$th grain. In these doses hyoscine seemed to diminish the trembling and the uneasiness and the restlessness of the muscles and no bad effects had been observed. After some weeks the drug seemed to lose its good effect, when it was best to stop it for a time; on re-commencing with it the good results were again obtained.—Dr. Leech stated that he had seen two cases of paralysis agitans in which the symptoms had been favourably influenced by hyoscine. He had no hesitation in giving up to $\frac{1}{75}$th grain by the mouth, but the same dose given hypodermically might produce alarming results.—Dr. Wild showed some results of experiments which he had made with a view of finding a substitute for calamine in the treatment of facial skin affection by ointments or lotions. He had mixed oxide and carbonate of zinc with various colouring agents. Zinc carbonate gave better results than the oxide. Of the colouring matters carmine gave an objectionable bluish tinge and tended to separate from the zinc carbonate on making a lotion. Jewellers' rouge (pure oxide of iron, Fe_2O_3), which was the colouring matter of real calamine, gave very good results. Armenian bole gave yellowish tinted preparations, but these were very suitable for some purposes. Precipitated zinc carbonate was finer and softer than the best elutriated calamine.—Dr. Wild exhibited some proprietary preparations bearing the names of Valsols and Vasogens. The basis was said to be oxygenated hydrocarbons which had a remarkable power of dissolving medicaments and which were stated to allow of rapid absorption when the compounds were rubbed into the skin. With some drugs, such as menthol and iodoform, emulsions with water could be obtained with the corresponding valsol or vasogen. Sulphur, iodine, guaiacol, creasote, ergotin, mercury, and many other drugs could be obtained made up with these compounds and their remarkable chemical and physical properties suggested that they might prove valuable bases particularly in dermatological work.

NORTH OF ENGLAND OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY.—A meeting of this society was held at Leeds on May 19th, Dr. A. Donald, the President, being in the chair.—Dr. Hellier read the notes of a case of Chronic Inversion of the Uterus successfully reduced by Aveling's Repositor. The labour was instrumental but no hæmorrhage or sign of inversion was noted at the time. On the fifth day the uterus was found at the vulva completely inverted. This was reduced by the medical man in attendance, but some months later, as menstruation was excessive, an examination was made and the uterus was found to be again completely inverted. Taxis under ether having failed Aveling's repositor was applied. This effected complete reduction within 51 hours. It was, however, necessary to give the patient an anæsthetic to remove the cup of the repositor which had become incarcerated in the cervix.—Remarks were made by Dr. Young, Professor C. J. Wright, Dr. A. Lea, and the President.—Dr. Braithwaite read a paper on a Method of Treating some Cases of Amenorrhœa by Mechanical Irritation of the Uterus with an Intra-uterine Stem. He advised that in certain cases of suppressed menstruation in which all other remedies failed to bring on the flow a vulcanite stem should be introduced. Suitable cases were those in which the patient was suffering from symptoms such as flushings, headache, and signs of plethora; the treatment was of no value unless there were distinct menstrual molimina. It was of no use in cases of infantile uterus. The introduction of a stem was also contra-indicated in the presence of flexions of the uterus, endometritis, or inflammation of the appendages. In some cases Dr. Braithwaite had succeeded in establishing typical menstruation, in other cases only a single flow of blood lasting a few days. The stems might be worn for some months and Dr. Braithwaite had never seen any harm arise from their use. In many cases great benefit resulted.—The President held that stem pessaries should never be employed and did not consider that amenorrhœa could be permanently cured by local means although a hæmorrhage from the uterus might be mechanically caused. He believed that in cases in which they were tolerated they sometimes caused permanent amenorrhœa.—Dr. Swailes read the notes of two cases of Umbilical Hæmorrhage. One was a feebly-nourished child born of healthy parents. The cord came away on the fourth day and the navel appeared to be normal, but on the tenth day bleeding commenced and in spite of local applications and ligatures it proved fatal two days later. No necropsy was obtained. The other infant was well developed and born of healthy parents. Hæmorrhage commenced on the sixth day; various styptics were applied and finally harelip pins were used, but the bleeding continued and the child died on the fourteenth day. On post-mortem examination the umbilical vein was found to be patent up to the liver, but no other abnormality was discovered.—Gynæcological

specimens were shown by Dr. Hellier, Dr. Braithwaite, Dr. J. E. Gemmell, and Dr. E. O. Croft.—Professor Wright showed a Ring Pessary which had been retained for 23 years.

BOMBAY MEDICAL AND PHYSICAL SOCIETY.—A meeting of this society was held in the University Library on March 24th, Lieutenant-Colonel W. K. Hatch, I.M.S., being in the chair.—Lieutenant-Colonel W. G. H. Henderson, I.M.S., read a paper on the Treatment of Tetanus by Carbolic Acid. His first case was a horse suffering from a very severe attack of tetanus into whose jugular vein 10 cubic centimetres of a solution of dried antitoxic serum had been introduced. Considerable aggravation of the symptoms followed and the case appeared to be hopeless. A drachm dose of pure carbolic acid was then injected into the subcutaneous tissue and repeated in an hour. During the continuance of the treatment more than two ounces of pure carbolic acid were injected and the horse recovered. There were some local swelling and inflammation at the seat of the injections. From July last up to the date of the paper Lieutenant-Colonel Henderson had treated 20 patients with carbolic acid hypodermically and in addition with chloral and bromide of potassium. Of these 20 cases seven recovered. Two minims of carbolic acid in 20 minims of water were injected three times a day. In no case did the injection cause the slightest trouble, although patients had received as many as 150 injections.—Mr. R. N. Kalapesi read a paper on the Radical Cure of Hydrocele. The operation used by him differed in no way from the injection of iodine except that the fluid injected was an emulsion of about a drachm of iodoform in two drachms each of glycerine and distilled water with a little cocaine. The whole quantity, which generally amounted to about half an ounce, was left in the sac after having been equally diffused throughout it by rubbing the scrotum over the testis. The operation was completely painless. Acute inflammation of the membrane began in a few hours but subsided in about two days and in from four to six days resolution was established. Some of the patients suffered from iodoform poisoning.—Lieutenant-Colonel Hatch said he considered that injection of the sac with perchloride of mercury was the best method, the treatment giving little pain and poisonous symptoms from the absorption of the mercury resulting in only one of his numerous cases.—Lieutenant-Colonel Hatch gave a description of two cases of Fracture of the Skull and of an operation for Epispadias.

DERMATOLOGICAL SOCIETY OF GREAT BRITAIN AND IRELAND.—The annual meeting of this society was held at 20, Hanover-square, W., on May 25th, the President, Dr. H. Radcliffe Crocker, being in the chair.—Very many interesting cases were shown by the President, Dr. A. Eddowes, Mr. Shillitoe, Dr. P. S. Abraham, and Dr. T. D. Savill. — Various Drawings and Microscopical Specimens were exhibited by the President, Mr. Hutchinson, Dr. Stowers, and others.—Dr. Radcliffe Crocker read an address on the Influence of the Individual on the Character and Development of Diseases of the Skin.—Mr. Hutchinson read a paper and opened a discussion on Diseases of the Nails, with Special Reference to their Significance as Symptoms.—The President, Dr. Galloway, Dr. Stowers, Mr. Pernet, Dr. Stopford Taylor, Dr. Savill, and others joined in the discussion.—The annual dinner took place at 8 P.M. at the Café Royal and the President was supported by, amongst many others, Dr. J. F. Payne, Mr. Hutchinson, Dr. F. Roberts, Dr. de Havilland Hall, Dr. Stopford Taylor, and Dr. Henry Waldo. The dinner was a purely social one and was much enjoyed by all present.

WEST PENWITH MEDICAL SOCIETY.—A meeting of this society was held in the West Cornwall Infirmary on May 10th, Dr. J. B. Montgomery, the President, being in the chair.—The President read a paper embodying Reminiscences of his practice, enumerating his experience of bleeding and leeching and the changes consequent on the introduction of the clinical thermometer, chloroform, hypodermic medication, the laryngoscope, and the ophthalmoscope.—Dr. Palemon Best read a paper on a case of Puerperal Septicæmia occurring in his practice, attended with phlegmasia, bedsore, abscesses in the thigh, and mania with severe symptoms, ending in recovery. Of the various drugs employed tincture of perchloride of iron seemed to have the best therapeutic influence.—Mr. C. S. Jago read a paper on a case of Meningitis occurring in a lad, aged 11 years, following on suppurative disease of the middle-ear. The patient ultimately died suddenly after a brief unconsciousness attended by strong convulsions.—Dr. H. M. Montgomerie showed specimens of Typhoid Ileum, Tuberculous Joints, and Undescended Testicle in opened inguinal sac.

Reviews and Notices of Books.

On the Principles which Govern Treatment in Diseases and Disorders of the Heart. The Lumleian Lectures delivered before the Royal College of Physicians of London by Sir RICHARD DOUGLAS POWELL, Bart., M.D. Lond. London: H. K. Lewis. 1899. Pp. 116. Price 6s.

IN the Lumleian Lectures the profession are accustomed to find subjects dealt with from the point of view of matured clinical experience, and Sir Richard Douglas Powell in those delivered by him in 1898 has kept to the rule and has given in this book a vast amount of useful information, most of it not to be found in ordinary text-books. The subject-matter is divided into four chief parts—dealing with the treatment of functional disorders, of acute inflammatory affections, of chronic heart disease, and of septic or ulcerative endocarditis. The most original lecture is that dealing with the functional derangements of the heart of which practitioners see many more examples than of valvular disease and which in the mass cause much more suffering. The causation of these derangements is traced to faults of environment, to central nervous disease, to reflex causes, especially from the alimentary canal, and to toxic causes, especially abuse of tea and tobacco, and "the whole range of hypnotics and analgesics." The symptoms are fully considered and extremely practical and common-sense directions are given for treatment. Medical men are warned against alarming patients by suggesting that their symptoms are due to organic disease. "We have most of us seen patients whose lives have been rendered miserable with the ever-present fear of disaster owing to a hasty and ill-considered diagnosis of a weak and dilated heart—a diagnosis which should never be made without the gravest sense of responsibility and requiring in some cases more than one careful examination." The author also draws attention to the danger of placing patients with functional heart disorder under such severe restrictions that mental depression becomes added to their other troubles. "It is of the utmost importance to secure to these people their interest in their surroundings and not ruthlessly to interfere with such duties and amusements, philanthropic, religious, or social, which are the salt which savours their life. We have to adjust, to apportion, not to spoil the daily life." The nature and treatment of angina pectoris and the equally distressing form known as "pseudo-angina" are fully discussed. In the treatment of acute affections absolute rest is considered the essential element in treatment. Alkalies and salicylates are recommended as lowering the blood-pressure and also as removing the chief cause of acute affections. The use of digitalis in such conditions is condemned, but full consideration is given to its employment in chronic forms. In connexion with chronic forms Sir R. Douglas Powell gives a very judicial account of the value of the various gymnastic methods of treatment associated with the names of Oertel and Schott and of the cases in which benefit is to be expected and the lectures conclude with an account of the treatment of ulcerative endocarditis. The most hopeful results have so far been met with after injections of anti-streptococcic serum—injections of yeast, although causing a fall of temperature, having little effect on the course of the disease in the cases in which it was tried.

From this account of the lectures it will be seen that they

deal with disorders which come daily under the notice of medical men and that these conditions are being treated entirely from the point of view of long clinical experience and careful observation. The great merit of the lectures lies in the breadth of their teaching. The heart is not considered merely as a mechanical pump, but as a neuro-muscular organ in close touch with every part of the organism, and in giving directions about treatment the surroundings and habits of the individual, his diet, and his general management are taken thoroughly into consideration with clear and precise regulations for conduct, which are to the full as important as medication of the vascular apparatus. The lectures are pleasantly written and though authoritative are not unpleasantly didactic in tone. There is a useful index and the value of the work is increased by excellent diagrams showing the complex innervation of the heart.

Hygiene and Public Health. Revised edition. By B. ARTHUR WHITELEGGE, M.D., B.Sc. Lond., D.P.H. Cantab., Her Majesty's Chief Inspector of Factories, and Lecturer on Public Health at Charing-cross Hospital Medical School. With 23 Illustrations. London: Cassell and Co. 1899. Price 7*s.* 6*d.*

WE have on more than one occasion spoken in appreciative terms of this little manual and hence we are glad to see that it has again been brought up to date. The first edition of this book appeared in August, 1890, and the fact that since then it has been no less than seven times revised is a sufficiently obvious indication of its popularity. Fortunately, too, in this last revised edition the author has been able to introduce valuable additional matter without at the same time apparently increasing the bulk of the volume—a point of no little importance having regard to the fact that one of the great attractions of "Whitelegge's Hygiene and Public Health" has always been its portable dimensions. The present issue runs to some 574 small pages exclusive of the index, and when we say that there is some reference in the book to every matter of importance in the subject dealt with the reader will understand that in some instances it has been possible to record little more than an impression. Such impressions are, however, obviously the result of much mental digestion on the author's part, and Dr. Whitelegge has certainly succeeded in compressing into a small space an admirable summary of the chief points with which a candidate for the Diploma of Public Health must of necessity be familiar, while strange as it may appear, the book will also be in some sense a work of reference for the medical officer of health. This is due partly to the wide area of knowledge which it covers and partly to the fact that it contains several of the Local Government Board memoranda to which the medical officer of health has not infrequently to refer. The provisions of the Vaccination Act of 1898 are succinctly set out, and the sections dealing with sewage disposal, with vital statistics, and with disinfection, have been brought into line with recent ideas and methods. The appendices, too, contain much useful information which can be readily referred to, such, for instance, as the statistical tables of the Local Government Board and of the Society of Medical Officers of Health, plans of the Local Government Board models for isolation hospitals, a summary of recent legislation, and a chapter on shellfish and infectious diseases. There is also a table on the conversion of weights and measures which may be found convenient. There is only one suggestion which we would make in respect to this most useful volume, and that is that foot-note references, in however small type, should be made to subjects referred to in the text. It would be useful if the reader were thus guided to some of the best works or papers dealing with the subject-matter of the text.

LIBRARY TABLE.

Practical Methods of Urine Analysis for Chemists and Druggists.—London: Offices of the *Chemist and Druggist.* 1899. Pp. 58. Price 1*s.* 6*d.*—The author of this small volume is described as a pharmacist "who has had nearly a quarter of a century's daily experience in the practical application of the methods described herein." We fear that he has been led to adhere to methods which were in vogue a quarter of a century ago. We cannot honestly say that "the methods described herein" are up-to-date or in accordance with modern and exact clinical requirements. Take, for example, the estimation of uric acid. The method enjoined is that given in very old physiological works and the scientific method of Dr. Hopkins is quite ignored. The late Sir George Johnson's handy and accurate picric acid test for sugar is not mentioned nor is Kjeldahl's method for the estimation of nitrogen. The processes described for the estimation and detection of albumin are quite inadequate for clinical purposes. We do not agree that the pharmacist is the person to undertake analysis of urine. It is clearly beyond his province.

The Art of Dining. By ABRAHAM HAYWARD, Q.C. With Annotations and Additions by CHARLES SAYLE. London: John Murray. 1899. Pp. 200. Price 5*s.*—Dining is so intimately connected with good humour and the latter with health that we make no apology for dealing with the subject, for in truth Hayward's charming work is a review or essay upon books by Brillat-Savarin, Ude, and "Original" Walker. The essays originally appeared in the *Quarterly Review* in 1835 and 1836 and were republished with additions in 1852. Readers owe a debt of gratitude to Mr. Murray for reprinting these eminently elegant criticisms on men and cooks, on food and its preparation. Hayward, living in an age when our forefathers struggled under the tyranny of tops and bottoms, sides and flanks and corners, made a plea for the simple dinner unless the householder had appliances and means to carry out a larger scale of hospitality. Who is there who does not remember the agonies undergone by Rosa Timmins and the visit of M. Cavalcadour and the *menu* in which the *tire-botte à l'odalisque* figured? Hayward gives Walker the credit of introducing the simple dinner into England and Walker was a remarkable man in many ways. He edited and wrote a periodical which came out weekly, called the *Original*, which contained his views upon sundry subjects. Among others he conceived a plan for attaining "high health" which was a curious foreshadowing of the monstrous follies of the so-called Christian Scientists. Not that Walker was a fool by any means, but his experiences are worth recording for their quaintness. He had been reading the "De Oratore" while in weak health and some passages suggested to him the expediency of "making the improvement in my health my study. I rose from my book, stood bolt upright, and determined to be well. In pursuance of my resolution I tried many extremes, was guilty of many absurdities, and committed many errors." For 18 years he had no illness, and the only inconvenience he suffered was that occasionally he had a cold, but as he remarks, "With a little more care I could entirely prevent them; or if I took the trouble I could remove the most severe in 24 hours." By the use of an abstemious diet he attained to such a pitch of excellence that owing to his "active exhalations" he could repel impurity, so much so that on one occasion he did not wash his face for a week, and no one saw, nor could he feel, the difference. We must confess that we are sorry for Mr. Walker, for no one who has not been really dirty knows the joys of being clean—at least, so we were told by a personal friend who travelled straight through from Tiflis to London without ever washing himself or taking off his clothes. Walker, however, was never ill, whereas

the Christian Scientist maintains that she—it is generally a woman—is not ill when she is so. Walker's dinners seem to have been as original as his periodical. Hayward quotes the following for, of all days in the year, Christmas day: "Crimped cod, woodcocks, and plum pudding, just as much of each as we wanted and accompanied by champagne." Hayward objects to this as being out of harmony with the season; to our mind its fault lies in the fact that no one can eat much woodcock, and also that when he can eat no more woodcock yet hunger still abounds. However, we might go on quoting the whole of this delightful book, and we will only say in addition that Mr. Sayle has given some examples of graces such as the Benedictio Mensæ of the Sarum Manual compared with those in use at three Cambridge Colleges. Of the latter the Trinity grace is the finest. In another edition Mr. Sayle might give some examples from the sister university, notably that in use at Magdalen College with its beautiful Hymnus Eucharisticus as set to music by Benjamin Rogers.

JOURNALS.

Birmingham Medical Review.—In the May number Mr. Lawson Tait writes on the Bedstead as an Important Factor in Domestic Hygiene and Comfort. Commencing with a history of the subject in Saxon, Norman, and subsequent epochs, he traces the rise and progress of metallic bedsteads. He strongly condemns the custom of two persons occupying the same bed, advising married couples to adopt the continental system of having "in their bedrooms two snug little bedsteads placed side by side." Bedrooms ought, he says, to be warmed by gas fires and to have plate-glass windows. Minute details are given of the bedsteads and wire mattresses which he recommends.

Scottish Medical and Surgical Journal.—Under the title of a "Digest" on the parasite of cancer Dr. Russell, the editor, publishes in the May number an account of recent investigations on the production of tumours by inoculation with pathogenic blastomycetes. Dr. Russell is himself a worker in this department of pathology, having in 1890 described certain objects which he believed to be parasitic organisms in cancer and to which he gave the name of "fuchsin bodies." Dr. A. G. Miller advocates a certain method of reducing dislocations of the shoulder by manipulation, a method which he says has been occasionally practised by many surgeons though not specially recommended by any.

Archives Générales de Médecine.—The principal article in the May number is a continuation of Dr. F. Gerlier's paper on Paralytic Vertigo, the first portion of which was noticed in THE LANCET of March 18th, page 775.

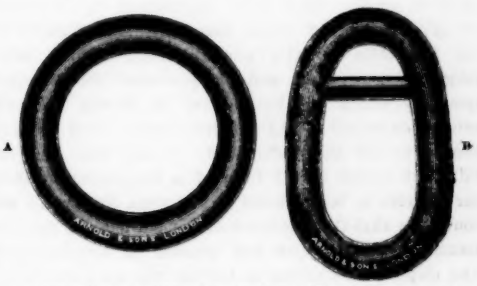
UNIVERSITY COLLEGE HOSPITAL.—The second of the series of the three concerts in aid of the funds of this charity was held in the Botanical Theatre, University College, on the afternoon of May 26th before a fashionable audience. The third concert will take place on Friday, June 16th, at 3.30 P.M.

CARSHALTON COTTAGE HOSPITAL.—On Wednesday, May 24th, Lord Rosebery opened this hospital which owes its origin to a legacy of £300 left by a Mr. Morgan for the purpose. In his address Lord Rosebery put the question, "What is the real advantage of being what is called well off?" and in his answer thereto said that as far as he could analyse it one great advantage of wealth was this: When those we love are sick, or weak, or aged, we can call to their assistance the best medical advice, change the climate for their benefit, prolong life as compared with the poor, not merely in length of years, but in easiness of existence. That he believed to be the greatest advantage which the rich had over the poor. The promoters of that hospital were doing something to bridge over that gulf.

New Inventions.

AN ANATOMICAL PESSARY.

MESSRS. ARNOLD AND SONS of West Smithfield have constructed for me what might be called an anatomical pessary. The Hodge pessary is only a lever in theory, the hard supports are unsatisfactory, and the rubber watch spring gives too much lateral pressure and floats anteriorly. The vagina, with its connexions to the rectum, bladder, and pelvic walls, is one of the chief uterine supports, and it is through lining (strengthening) this muscular tube that we are able to keep it on the stretch, preventing bagging and prolapse which almost invariably occurs in every form of uterine displacement. Taking the rubber watch-spring pessary as the most useful support we possess, I have had it constricted by a cross-bar so that an ordinary size with a diameter of eight centimetres is converted into an ovoid with a long diameter of 10 centimetres (see illustration). I have found no inconvenience



A, The ordinary watch-spring pessary. B, The circle converted into an ovoid by the bar.

from the bar, which is not in the middle, but a size larger instrument than that usually worn will be retained with comfort. In cystocele an enlargement might be made on the small anterior curve, which would prove a more stable support than the double horse-shoe pessary of Gehrung, which is recommended on high authority.

Greystoke, Penrith. THOMAS JACKSON.

BOOTS AND SHOES FOR FLAT FEET.

FLAT feet in young persons may often be corrected by judicious treatment directed to strengthening the flexor muscles but cases continually occur in which the orthopædic surgeon is under the necessity of resorting to one or other of the various forms of mechanical support. An excellent pattern of spring support for the inside of the instep has been submitted to us by Mr. Frank Jenner of 37, Palmerston-road, Boscombe, Bournemouth. Part of the spring lies between the inner and the outer sole of the boot or shoe and is fixed immoveably in position by concealed rivets. A projecting portion of the spring rises up on the inner side of the instep and forms the backing of a smooth leather cushion padded with wool which supplies the requisite support to the sunken arch of the foot. The whole spring is one piece of thin sheet steel, curved to the shape of the sole and instep; the largest size weighs only three-quarters of an ounce, so that the extra weight is inappreciable and the boot gives to the eye no external indication whatever that there is anything peculiar in its construction. Boots fitted with these springs can therefore be recommended as efficient supports for feet requiring such mechanical aid, and at the same time they have the advantage of not drawing attention to the wearer's infirmity. The samples submitted to us were "fashionable" in shape and style, with patent leather uppers. For those who prefer something cheaper Mr. Jenner makes a removeable "sock" with the spring inserted for wearing inside ordinary boots. The sock complete weighs one and three-quarter ounces.

THE LANCET.

LONDON: SATURDAY, JUNE 3, 1899.

SUNDAY, JUNE 11TH, is the day selected this year for the simultaneous appeal from London pulpits on behalf of the medical charities of the metropolis. For 26 years this annual appeal has gone forth, and the people of the wealthiest city in the world, at the season of the year when the luxuries of that city are most in evidence, have been asked to spare a few thoughts for the needs of the sick poor and to bestow some contribution in money towards the support of those institutions whose glory it is that they are "maintained by voluntary contributions." The share taken by THE LANCET in the institution of this annual collection from every religious community and in particular the practical sympathy which our late editor, Dr. JAMES WAKLEY, evinced on behalf of the Hospital Sunday Fund are well known to all our readers. By issuing this year our thirteenth appeal in the form of a Supplement we show our interest to be unabated in this great charity and our conviction that the conscience of London has not been yet thoroughly aroused upon the question of hospital relief. The majority of dwellers in London take no share in her most splendid charities—a fact which is being slowly brought home to persons of all ranks in life. We hope that other journals will be found this year joining with us in the attempt to make this indifference more culpable—to evoke, in fact, a general sentiment that the London hospitals have claims which in fairness to the enormous work done by them for the community cannot be disregarded by the community.

To assist those who will eight days hence plead the cause of the hospitals with persuasive eloquence, we have prepared as in former years a summary of the objects of the Fund and of the needs of the hospitals to be distributed among the congregations. If in doing this we may be thought to have diverged in any degree from the objects of a medical journal we have to say only that the cause of charity knows no limitation. In our annual Supplement which it has been our custom for many years to issue on this day we address a wider audience than is our wont and do our best to arouse our fellow citizens to a sense of the demands that their less prosperous neighbours make on their thoughts and sympathy. We speak of what we know when we say that these demands are generally neglected. The medical profession is daily, nay, hourly, engaged in the devoted service of man, and as medical journalists we have a right to ask the public that some share of the burden should be borne by others whose sole opportunity perchance of joining in this service is limited to a response to an appeal from the pulpit on Hospital Sunday. London, alas, is apathetic as to the needs of its hospitals. Year by year the city grows greater and year by year she grows more wealthy. Enormous competition may here and there detach some trade from the ancient port, but London is now what she has never been before in her history—the pleasure capital of the world as well as its commercial and financial headquarters. And with this increase of wealth and population there have grown up coincidentally more urgent claims upon the charitable. The rise in riches of one section of London means the fall into poverty of others. Many unfortunate people are attracted to the great city in the hope of sharing in its prosperity only to find that for every berth there are 50 claimants and for every mouthful 50 mouths. The prosperous among us, the well-to-do, nay, all who can keep their pecuniary heads above the water of debt, should think on Hospital Sunday of the plight of the sick poor. They should think what these their most wretched fellow creatures would do if the great city did not provide for them the hospitality of the hospital. And they should ask themselves if they are not bound to help. It is surely something to belong to London. Let the man who feels this prove that his citizenship is not merely in name, that he is not content to profit by the vast wealth of London, by her remarkable educational facilities, and by the lavish manner in which she affords opportunities for tasting the finest artistic and intellectual fruit, but that he is ready to share some of her terrible responsibilities also. Once at least every year the inhabitant of London has an opportunity of acknowledging these claims. On Hospital Sunday he should prove to the world that he can be stirred by a common impulse to gratitude for many favours and should show that he is not of Hampstead or Dulwich, of Whitechapel or Mayfair, of Acton or Chelsea, but of London, proud to be so, and proud to help in supporting the noblest charities of his city.

We have in our Supplement this year laid particular stress upon the fact that the ministers who make the appeal for the Hospital Sunday Fund from their pulpits are as much fitted to do so from knowledge of the subject as from the natural association of the care of the sick with the clerical office of every religion. The point is one upon which we can hardly lay too much stress, for it affords a practical guarantee of the absolute necessity that the Fund should be supported by all religious men. If the charity were one which medical men alone advocated, or which hospital authorities alone pressed upon the public attention, or which this or that school of religious thought alone was prepared to aid by exhortation, a certain shrewd class of citizens would be entitled to look askance at the request for their subscriptions. They would have reason for suspecting interested motives. But while the Hospital Sunday Fund is blessed by the hospital authorities who supply in support of their claims the woful figures which we have summarised in our Supplement; and while the noble work of the voluntary hospitals of London is vouched for by the medical profession who have peculiar opportunities of knowing the truth and no selfish reasons whatever for magnifying the extent of that work; the Fund is also recommended to the benevolent attention of all congregations by their ministers, by the very men to whom the sick instinctively turn to tell the sad stories of their lives. The ministers are the

earthly comforters of the sick poor. They know better than anyone what the shelter and treatment of the hospital mean to the weakly of their flock and their testimony is of paramount importance. We trust that on Sunday, June 11th, the congregations of London will listen to their appeal on behalf of the Hospital Sunday Fund with a predisposition to support to the best of their power the medical charities of London.

IN our issue of May 27th we considered the question of climate and acclimatisation from a general point of view. We now proceed to deal with the subject from a practical and utilitarian standpoint—that is to say, in the restricted sense in which people usually speak of acclimatisation. The simplest and most useful way of considering the matter is to deal with the case of emigrants into a new climate or of intending colonists or of a military expeditionary force proceeding for service in a tropical or sub-tropical country with a view to becoming, let us say, an army of occupation.

Obviously the first thing to be done is to obtain all the knowledge that we can from published and other available sources of information and, if possible, by personal inquiry on the spot or through the instrumentality of a special commission appointed for the purpose. It is scarcely necessary to dwell upon the importance of preparedness or to point out the enormous advantage to be derived from a knowledge of such matters as the following: the meteorological, geographical, and topographical features of the country; the presence or absence of mountain ranges, high table-lands and uplands, such as can be made available for occupation and sanatoria; the climatic character of both the plains and the hills; the character and periodicity of the seasons; the natural and other products of the country; the nature and the prevalence of diseases among the inhabitants, and especially the presence or not of those of a malarial origin; the available sources of water-supply; and the way in which the country or different parts of it lends itself to the introduction of effective sanitation and drainage—for however good and suitable may be the sites available for selection as stations, good barracks, good buildings, and good sanitation are essential to health; and the central pivot upon which sanitation hinges is the dwelling and its surroundings. In the case of intending colonists or of an expeditionary force proceeding for service in some hot climate there are several points to be attended to which may make or mar the success of the undertaking, concerning which there is, perhaps, no country in the world more entitled to speak with the authority which comes of dearly bought experience than our own. Our soldiers, our sailors, our colonists, and our travellers are spread everywhere and our official reports of one sort and another are a mine of information on the subject.

These points have reference to the racial and physical types and characteristics of those who may seem best adapted for the purpose; the selection of the most suitable seasons for proceeding on their mission; the diseases to which the newly arrived are most liable during the earlier years of their residence in a hot climate; and lastly, the measures which can be adopted for the maintenance of health under such circumstances.

We have already adverted to the influence of race. As compared with Europeans and the inhabitants of cold and temperate climates the Eastern and Southern races, the Asiatic, African, and mixed races exhibit a relative degree of immunity from many diseases—and notably from enteric fever which plays such an important rôle in the medical history of all campaigns and expeditions in hot climates. Our experience in Egypt and elsewhere and that of the French in Algiers, Tunis, and other countries have been to a similar effect. In the French expeditions the Zouaves and troops with an admixture of Arab blood and, in a less degree, the troops coming from southern France suffered less from this and other forms of fever than did those from the north. The soldiers of the Imperial army of Rome under CÆSAR were, so far as we know, not fair men of large stature, but "wiry" men of medium stature and of dark or olive complexion, like the Italians of the present day. Speaking broadly it comes to this, that, other things being equal, the nearer in physical type, temperament, and complexion the intending emigrants approach to the natives of warm latitudes in these respects the more likely are they to stand the climate and to prove healthier than fair-skinned men of larger stature who, on the other hand, are far better adapted for hard and arduous work and supreme physical effort in cold and temperate climates. For service in hot climates grown men of medium stature, spare frames, dark hair and complexion, and thick skins may be expected to retain their health and to make the more enduring and efficient soldiers. This did not escape the attention of that NEWTON among naturalists—DARWIN—who, in addition to "the infinite amount of painstaking first of all" which is said to be one of the attributes of genius, possessed a marvellous sagacity in drawing observations from tributary and converging streams of relevant and apparently irrelevant facts and phenomena and combining them in a generalisation. In the third volume of the "Life of Darwin" we find him conjecturing with respect to the differences of races that much may be due to the correlation of complexion (and consequently hair) with constitution. "Assume," he says, "that a dusky individual best escaped miasma and you will see what I mean." He tried to glean some information from army surgeons in tropical climates through the head of the Army Medical Department with the view of ascertaining this point.

As to age and acclimatisation in relation to military service it may be said that no young soldier should be allowed to embark for service in India until he had attained 20 years of age at least and completed his drill in this country. The British army is a short service army and we are compelled to enlist men when we can get them. Probably the age at which the British soldier is, for the moment, of greatest value in India is about 25 years. A soldier of 25 years of age with a service of two or three years in India is about at his highest state of physical efficiency.

The extreme susceptibility of recently arrived Europeans in India to enteric fever as compared with the immunity of the stationary native population and army has a wide significance and application. The natives suffer equally

with Europeans from malarial fever, diarrhœa, and dysentery, and many other diseases, but rarely from abscess of the liver. The European soldier in the plains of India dies from the effects of the heat and from the diseases incidental thereto, while the native soldier of the plains perishes in the cold season from pneumonia and respiratory diseases, especially when serving in the hills.

The European army in India is almost exclusively made up of young men of the ages which experience has shown to be most liable to contract enteric fever everywhere—indeed, it might be termed the enteric fever age—and the existing service system necessarily involves that many of them have recently arrived in that country and that nearly all have had a relatively short residence and service there. The effect of this combined influence in increasing the soldiers' susceptibility to enteric fever (so unfortunately prevalent in all tropical and sub-tropical climates) is enormous. The late Dr. BRYDEN showed that while the liability to die from enteric fever in the case of the soldier of above seven years' service in India was 3·87, it was 82·44 in the young and recently arrived and 13·69 in the class resident from five to seven years, reckoning liability at 100.

The statistical deductions drawn by the Sanitary Commissioner with the Government of India at page 47 of his last report (1896) regarding the admission and death-rates from this fever in relation to age (youth) and length of residence may be referred to here. Out of the total number of deaths at all ages from enteric fever 78 per cent. were between 20 and 24 years of age and 36 per cent. were in the first year of residence. The greatest liability to contract this fever is in the first year of residence in India and thereafter the liability suddenly declines. The greater the supply of susceptible material the more the disease has prevailed.

As regards the selection of the most suitable seasons for the arrival of emigrants in a new country we may say at once that it has a most important bearing. The military history of every country affords illustrations of the grave consequences which have followed neglect in this respect. The extremely unhealthy and malarious nature of the climate of the West Coast of Africa is well known. All the expeditions on that coast up to the campaign of 1873–74 had been attended with disastrous results; the sickness and mortality were little short of appalling. But the right time having been selected for the Ashanti expedition of 1873–74, and the operations having been strictly limited to the healthy dry season and every point having been studied with special attention to their exceptional nature, the sickness and loss of life in a force of 2587 European officers and men were reduced to comparatively insignificant proportions—81 deaths from disease and loss in action, or 3·14 per cent. of the total strength disembarked. It was rightly named an engineers' and doctors' war. The results of the last campaign in 1895–6, when there was no fighting, were also very good. On the other hand, a force of nearly the same strength was somewhat hurriedly sent to Cyprus in 1878 and disembarked there in the hottest season of the year. The season was possibly an exceptionally unhealthy one, for Cyprus has since proved a very healthy station. The island during the first four to six months of our occupation of it, owing to the hot season and the exposure to which the troops were subjected on first arrival, proved very unhealthy. The sick- and death-rates from climatic fever and dysentery were exceptionally high—equal to an annual ratio of 4397 admissions and 40·27 deaths per 1000 respectively. Of course, sanitary considerations must often give way to those of public or military policy, but it would be easy to cite similar instances from the records of continental nations. Knowledge is power, and every fresh accession to our knowledge tends to modify our judgment and to lessen our belief in the necessarily prejudicial influences hitherto attributed to climate alone. The tendency of scientific research is to correct and enlarge our conceptions regarding the power which we possess to discount the effects of climate by the adoption of timely precautionary measures and by leading temperate and wholesome lives in conformity and harmony with the requirements of the surrounding conditions. The discovery of the contagia of the communicable diseases and of the methods of cultivating them by which they may be dealt with experimentally as living entities, on the one hand, and the ardent investigations into the methods of procuring immunity from infectious and other diseases (cholera, yellow fever, and plague, for example) by inoculations of an attenuated virus, on the other hand, have revolutionised our ideas. Setting malaria aside the trend of opinion among hygienic enthusiasts at the present time seems to lie in this direction—viz., that if a colony of healthy emigrants could be transplanted into a new country and if care were taken to secure their freedom from all forms of epidemic and infectious disease (which when once introduced into the midst of a population are most difficult to eradicate) any injurious effects of climate might by strict attention to hygienic laws—general and personal—be reduced to a practically negligible minimum. Without going so far as this—for, as we have already said, we do not think it can be denied that residence in hot climates under the circumstances of ordinary life has an injurious effect upon Europeans—we cannot doubt that a large majority of persons of sound and healthy constitution, living amidst sanitary surroundings and not eating, drinking, and clothing themselves in a way directly opposed to the *requirements* of the climate, as so many do, might enjoy a far larger amount of health in most climates than has fallen to their lot up to the present time.

HISTORY records many assemblies of specially selected men, divines, politicians, or men of science respectively, called together to discuss matters deeply affecting the whole of the human race. Some of these meetings have borne results which have never been effaced, whilst others have unfortunately proved abortive. Some of them, like the Council of Nicea, have been the culminating event in a long series of similar assemblies, convoked to remedy the evils occasioned by prejudice, envy, or ignorance. As has been pointed out by several of our contemporaries during the past few days and accentuated by eminent speakers the congresses assembled at The Hague and Berlin will be remembered by future ages as indicative of the spirit of our time. The one is attempting to lessen the loss of life inflicted by war

whilst the other is debating the most powerful and ready means to lessen the loss of life occasioned by the most fatal and prevalent of all diseases. The remarks made in a leading article in the *Times* of May 27th are well worthy of repetition as bearing out the spirit which led up to the calling together of the eminent personages at The Hague and in Berlin: "If a large part of the wars in the past might have been averted by the exercise of good sense and good temper not a few of the maladies of mankind might be controlled and deprived of their virulence by science. ..... For one person who loses his life in battle seven die of diseases which science declares can be eradicated or much diminished in malignity. And as efforts are being made to bring about concord by international agreements and concerted action so medical science seeks in these means new defences against some of the most destructive enemies of mankind."

In opening the International Congress of Hygiene in 1891 His Royal Highness the PRINCE OF WALES made use of an expression which has become historical. In reference to certain diseases he remarked: "If preventable, then why not prevented?" To no malady can this be more aptly applied than to tuberculosis. The prevalence of this scourge is too well known to our readers to need comment by us but it is interesting to find that from the figures given by Dr. BROUARDEL and Dr. KÖHLER England suffers much less than most other countries, the actual death-rate being only 1358 per 1,000,000 as against 4000 in Russia. Of the 14 largest cities of the civilised world London enjoys, as regards tuberculosis, the greatest degree of immunity with the exception of Naples and Buenos Ayres, whilst the highest mortality occurs in Moscow, St. Petersburg, Vienna, and Budapest. But everywhere this malady is a scourge to mankind and in numerous countries in the tropical zone is known as "the national disease."

In delivering the Harben Lectures for 1898 Sir RICHARD THORNE referred to some of the administrative measures which had been adopted with considerable success in lowering the mortality from certain forms of tuberculosis—notably the pulmonary variety—such as draining the subsoil, concreting the ground surface of dwellings, and the provision of damp courses in walls. But much more remains to be done and doubtless the discussions which have just taken place in Berlin will lead to the adoption of important regulations. Even then there are numerous difficulties to be faced, but with these we have not space at present to deal at length. Two points, however, must be more particularly borne in mind. One is that the suggestions must be practical and the other is that they must not be extreme. Although the importance of individual practitioners duly instructing their patients as to the disposal of the sputa cannot be over-rated, yet in order appreciably to arrest the spread of the disease more than this is necessary. One man may be prudent and may live a healthy life, but his prudence and his good habits are of no avail if his neighbours will not listen to the voice of their medical advisers and are careless and improvident. As Count VON POSADOWSKY pointed out at the opening meeting at Berlin, one nation may take the best precautions against plague, small-pox, and other enemies of the race, but such efforts may go for little in these days of frequent and facile intercourse if disease is permitted to spread unchecked on the other side of a frontier line. International action in regard to disease is more and more understood to be a necessity of civilisation and one of a kind to which national prejudices must give way and we sympathise with this speaker in his remark that it is not Utopian to look forward to a time when international measures to prevent the dissemination of disease will be among the most important functions of civilised States. We do not presume to forecast the recommendations of the Congress, but, as we have before stated, we cannot support the more extreme measures which have been urged by some observers. The difficulties of compelling a community to obey stringent sanitary regulations has been amply illustrated by the plague regulations in India and the vaccination laws in this country, and we deprecate any measures such as compulsory isolation of affected persons which would not only lead to serious social disasters, but would defeat the intention of the measure by preventing patients from seeking advice at that period of the disease when treatment is most hopeful lest complete and prolonged separation from their families and friends should be forced upon them.

The proceedings of the Congress at Berlin have naturally been watched with interest by the whole civilised world. We do not look for any new scientific facts to be made known, but the interchange of views between the scientific authorities of all nations cannot fail to be a source of profit in evoking expressions of opinion as to the curative measures adopted in different countries and also as to the prophylactic means which may seem to promise most success in combating a malady which is responsible for more deaths than is any other disease.

Annotations.

"Ne quid nimis."

SIR GEORGE PILKINGTON, M.P., AND THE MEDICAL REGISTER.

As medical journalists we have no concern with general politics except in so far as they affect medical and sanitary questions. None the less do we welcome any fresh accessions to the ranks of medical men in Parliament whatever may be the political party to which they belong. Sir George Augustus Pilkington has just been elected as Member of Parliament for the Southport Division of Lancashire and in offering him our sincere congratulations we may note that the *Times* in a leading article remarks that "Sir George's victory seems to be mainly attributable to his personal popularity." He is not new to Parliament, having already represented the same constituency in 1885. Sir George Pilkington is the son of a medical man, Mr. Robert Gorton Coombe, and was himself for some years in general practice at Southport, of which town he has twice been Mayor; he is also a Justice of the Peace. In 1875 Mr. George Augustus Coombe married the daughter of Mr. James Pilkington and assumed that name. It is in connexion with this fact that we have used the heading "Sir George Pilkington and the Medical Register," the bearing of which may not at once be apparent. In turning to the Medical Register for 1899 to verify

his medical qualifications we failed to find the name of George Augustus Pilkington. We did, however, find the following entry on p. 382: "Coombe, George Augustus, 9, Lord-street West, Southport; 1870, Dec. 3rd, E.; Mem. R. Coll. Surg. Eng., 1870. Lic. Soc. Apoth. Lond., 1870." We recently had occasion to draw attention to some unsatisfactory features of the Medical Register and we think that the above instance of inaccuracy, which has probably been going on for 24 years (we have not looked through all the Registers to verify but the entry is the same in 1898) emphasises our previous contention. We also observe that in the Register some few names are given with initials and not the complete Christian names. Surely this should be rectified. It is to be hoped that the General Medical Council will see to this matter during the present session. We have no wish to be querulous, but the absolute correctness of the Medical Register is of the highest importance both to the profession and to the public. The Medical Directory, we may add, gives Sir George Pilkington's name and qualifications correctly.

CORONER'S INQUEST WITHOUT MEDICAL EVIDENCE.

WE are constantly having to animadvert upon the habit which some coroners have of holding inquests without medical evidence. The duty of a coroner is to hold an inquiry as to how a deceased man came by his death and thus in many cases to aid in the detection of crime. Of course, there are many cases where the cause of death is so obvious that no medical evidence is necessary to point it out. Such cases we mean as when a man is run over by a train or killed by falling into some boiling fluid; but the case of the late Mr. Hawthorn Kitson, a brother of Sir James Kitson, stands on a very different footing. The inquiry into his death was held by Major Taylor, the coroner for the West Riding of Yorkshire, on May 22nd, and the evidence was to the effect that Mr. Kitson had for some time past been in indifferent health. Sir James Kitson had seen him alive on April 15th when he complained of feeling unwell, but Sir James Kitson was in no way alarmed. According to the evidence of the footman Mr. Kitson appeared to be in his usual health and spirits on the Saturday before his death, May 20th, when he went to business as usual. On Monday, the 22nd, the footman went into the dining-room to lay the cloth and found his master sitting there. He went away and on returning in about an hour he found him lying on his face on the floor a yard or two away from where he had been sitting. Witness telephoned for Mr. Pogson. The coroner said that if the jury were satisfied that the death was due to natural causes they need not go on. Several jurymen expressed a wish to hear the evidence of Mr. Pogson. The following conversation then occurred as reported in the *Yorkshire Post* of May 23rd:—

The Coroner: What would the doctor know?

A Juryman: He is a skilled medical man.

The Coroner: He cannot tell you anything more without making a post-mortem examination.

A Juryman: What did he pronounce death to be due to?

The Coroner: He has not pronounced it at all. If you want medical evidence we must have a post-mortem examination. I know nothing but what I have heard since I came here. As for medical evidence, it is not the slightest good unless it is complete. My experience of many years shows that it is more apt to confuse than to help you.

After consulting with his colleagues the foreman of the jury said they would abide by the coroner's recommendation in the matter. Some further discussion followed and the jury then agreed to a verdict of "Death from natural causes."

Now we quite agree with the coroner in that in all probability Mr. Pogson could not have told the cause of death without a post-mortem examination, but we absolutely fail to see how the jury arrived at their verdict. An inquiry of this sort is a farce and brings the old institution of the coroner's inquest into disrepute. The case is just one of those where a post-mortem examination should have been ordered.

THE CAMBRIDGE LONG VACATION PATHOLOGICAL COURSE.

As will be seen by an announcement in our advertisement columns the work of the Long Vacation course in pathology at the University of Cambridge will commence on July 6th. The course will include lectures on pathology, demonstrations in morbid anatomy and histology, clinical pathology, and bacteriology. Information as to fees and other points can be obtained from Mr. Strangeways Pigg, Pathological Laboratory, New Museums, Cambridge.

THE SCANDAL AT THE LIVERPOOL HOSPITAL FOR CANCER AND SKIN DISEASES.

IN our issue of May 27th we commented upon the unsatisfactory state of affairs existing at the Liverpool Hospital for Cancer and Skin Diseases owing to certain strained relations existing between the medical officers. At a meeting of the subscribers held on May 10th a recommendation of a committee was carried that Dr. Taylor and Dr. Whitford should resign. At the annual meeting of the subscribers held on May 30th it was announced that Mr. Crawford, the third medical officer, against whom the other two had made allegations, had also resigned his post. We think that Mr. Crawford is to be congratulated on the step which he has taken.

TRANSPLANTATION OF NERVES.

IN a certain proportion of cases of injuries to nerves the ends cannot be brought together and a portion of nerve obtained from one of the lower animals or from an amputated limb has been implanted. Dr. R. Peterson has contributed an important article on transplantation of nerves to the *American Journal of the Medical Sciences* for April which contains an original case and an analysis of the small number of previously recorded cases. A man, aged 24 years, was severely injured in the right wrist by a circular saw. The ulnar artery and a number of flexor tendons were severed. The latter were immediately sutured. He lost sensibility in the hand and later there were trophic changes—glossy skin, corrugated nails and ulceration of the skin, and marked atrophy of the small muscles. All the digits on the palmar aspect and the inner surface of the thumb were anæsthetic. The muscles of the hand supplied by the median and ulnar nerves gave the reaction of degeneration. Five months after the injury the divided ends of the median nerve were exposed. They were found to be united by connective tissue. The proximal end formed a hard bulb. The connective tissue and the bulb were removed, leaving a gap of three and a half centimetres. So much force was required to bring together the cut ends that transplantation of nerve was decided upon. Four centimetres of the sciatic nerve of a young black hound were sutured between the ends with kangaroo tendon. A similar operation was performed on the ulnar nerve. On the following day distinct return of sensibility in the thumb was found; the fingers could not be tested without disturbing the bandage. Two months after operation the skin had lost its shiny look and appeared normal and the muscles, though still atrophied, were regaining power. A month later sensibility was complete

except on the dorsal surface of the third phalanges of the second, third, and fourth fingers. The only anæsthetic areas on the palmar aspect were on the second and third phalanges of the third and fourth fingers and on the third phalanx of the second finger. There are 20 recorded cases of transplantation of nerves. The median nerve was operated on in seven cases, the ulnar in three, the median and ulnar nerves in two, the musculo-spiral nerve in seven, and the sciatic in one. There were eight primary and 12 secondary operations. The time from the injury to the operation varied from 48 hours to one and a quarter years. Eight out of the 12 cases of secondary operation showed improvement in sensibility or motion while only four out of the eight cases of primary operation improved. The interval between the ends of the divided nerves varied from three to 10 centimetres but distance did not seem to affect the result. In nine cases the transplanted segments were from the sciatic nerves of dogs, in three from rabbits, in one from a kitten, in one from the spinal cord of a rabbit, and in five from recently amputated limbs. In one case an inch of the sciatic nerve which had been excised was itself transplanted. In nine cases catgut was used to unite the implanted segments to the divided ends, in three silk, and in one kangaroo tendon. No case recovered entirely. The nearest approach to complete recovery took place in the case longest under observation, in which at the end of six years sensibility had entirely returned and the only weak muscle was the abductor pollicis. In three cases there was practically recovery of sensibility and motion and the hand was useful. Sensibility completely returned in four cases, nearly completely in three cases, and was improved in four cases. Muscular power improved in four cases. There was improvement in either motion or sensibility in 12 cases, and no improvement in either in six cases. The average time in which sensibility appeared after the operation was about 10 days; motion returned in about two and a half months.

HOSPITAL REFORM ASSOCIATION.

THE report of the council of this association for the year 1898 states that the past year as compared with the previous one (1897) has been rather uneventful. At the same time work has been accomplished which will, it is hoped, bear fruit in the future. The meeting of the association which was held by kind permission of the Council of the British Medical Association in Edinburgh was rather a disappointing one with regard to the number of members who attended it. It is doubtful whether it is wise to hold a meeting when the annual meeting of the British Medical Association is in progress. That Association has to perform so much work in such a limited amount of time that it is hardly to be expected that much attention will be given to any other business than that connected with it, and it might be as well to consider whether a meeting in London during the autumn months would not prove more beneficial to the objects of the Hospital Reform Association. The honorary secretary has made every effort to interest the various charity organisations and the hospital authorities in the work of the association but with little result. It is obvious that there is quite as much need for reform in Scotland as there undoubtedly is in England and Wales, for in Edinburgh, Glasgow, and Aberdeen it is manifest that the number of medical charities is far too great and that the proportion of out-patients to the population is a very high one. The case of the Irish hospitals was also brought under notice by a paper read at the Annual Congress of the Royal Institute of Public Health which met at Dublin in the autumn of last year. The Irish system of medical relief differs very materially from the systems adopted in the sister countries, and it may be mentioned that the Dublin hospitals receive subsidies amounting to many thousands of pounds annually from the Government. The county infirmaries in Ireland are mainly kept up by a county rate. As to the future work of the association it is suggested to bring prominently forward such questions as payments by patients, provident dispensaries, and the "inquiry" system. The following members have been deputed to act as delegates to the International Congress on Medical Ethics to be held next year in Paris: Dr. David Walsh, Dr. Lovell Drage, and Mr. T. Garrett Horder. The financial position of the association is satisfactory and the report concludes with an expression of regret at the loss which the association has sustained owing to the resignation of the chairman Dr. Ward Cousins.

DIPHTHERIA IN SOUTH WALES.

OF late years diphtheria has clung to the South Wales coalfields most tenaciously. In 1898, among the 33 great towns of England and Wales Swansea had a death-rate from this disease of 1·17 per 1000 persons living and Cardiff of 0·72 per 1000, the nearest approach to these high rates being 0·63 per 1000 at West Ham, while the rate for the 33 great towns taken collectively was 0·31 per 1000. Among the 67 large towns of the Registrar-General's group Aberdare and Rhondda were prominent with diphtheria death-rates of 1·85 and 1·10 per 1000 respectively. At Aberdare the disease is as persistent this year as it was last, for during the first 20 weeks of the year nearly 800 cases were notified among a population of about 50,000 persons, while in Rhondda, where the population is 120,000, over 800 cases have occurred within a like period. In the latter district the public schools in two localities are now closed in consequence of the epidemic. At Aberdare the district council will not consent to the closing of schools although strongly advised to do so by their medical officer of health. Up to the present time Swansea has this year had some 400 cases and Cardiff about 300 to deal with. In his annual report to the Cardiff Council which has just been issued Dr. Walford considers that there is a close connexion between the prevalence of diphtheria in Cardiff and its prevalence in those neighbouring localities having an extensive communication with Cardiff by means of railway passenger traffic, and he notices that there was a marked fall in the prevalence of diphtheria last year simultaneously with the interruption in the passenger and railway traffic consequent upon the strike of the colliers during the spring and summer months of 1898.

SKIN-GRAFTING IN A WORKHOUSE.

De minimis non curat lex is a time-honoured maxim which is at present undergoing revision by the Local Government Board and the St. Austell Board of Guardians. It appears that at a meeting of the last-mentioned board held on May 19th a letter was read from the Local Government Board enclosing a communication from the Rev. B. Waugh of the National Society for the Prevention of Cruelty to Children. This gentleman complained that the medical officer of the St. Austell Workhouse had removed some skin from the sole of the foot of an orphan boy in the workhouse and had grafted it upon the ulcerated leg of a woman who was also an inmate. Mr. Waugh went on to state that the matter had been brought before the guardians but had been hushed up and he thought that the Local Government Board might consider it a subject for inquiry. The master of the workhouse, in reply to the guardians, said that the operation was apparently painless and was such a trifling one that it was not considered necessary to report upon it. It was eventually decided to inform the Local Government Board that the matter had not been previously

brought before the guardians, and Mr. W. Mason, the medical officer, was requested to send a report to the Local Government Board upon the subject. This controversy seems to be a faint and grotesque reflection of the Auckland case reported in THE LANCET of April 23rd, 1898, p. 1153. Our readers will remember that a female who had consented to furnish skin grafts brought an action against the surgeon on the ground that he had exceeded the authority given by her, inasmuch as he had taken Thiersch grafts having an area of 52 square inches. After a trial lasting four days the jury found a verdict for the defendant. Comparing this with the St. Austell case, it is as difficult to see what offence Mr. Mason can have committed as it is to understand why he preferred to take the graft from the sole of the foot. Presumably the Society for the Prevention of Cruelty to Children investigated the circumstances before presenting a formal complaint to the Local Government Board and it would be interesting to know the nature of the "cruelty" which seemed to call for their interference.

CHARGING A MEDICAL MAN WITH INCOMPETENCY.

AT the Madeley (Salop) County Court recently, before Judge Harries Lee, Mr. G. D. Collins (Broseley) sued the Rev. W. J. Johnson, rector of Little Wenlock, for the sum of £7 for medical attendance upon his wife, daughter, and son. The defendant said he refused to pay the bill on the ground that Mr. Collins in his treatment of his wife and daughter had proved himself to be either incompetent, indifferent, or idle. He attributed blame to Mr. Collins in not taking the usual tests to satisfy himself whether his wife suffered from the malady by which he told her she was afflicted. Finding no relief while under the care of Mr. Collins his wife went to Germany and saw a medical man there who told him that she had been treated wrongly. Under the German treatment his wife progressed. His Honour said that he hoped the defendant did not wish him to decide between the opinions of two medical practitioners on the virtues of different medicines. Flagrant misconduct on the part of a practitioner might have been a good ground for refusing to pay his bill, but this had not been proved against the plaintiff who no doubt formed the best opinion he could of the case under his treatment, though possibly it was a wrong one. Mr. Collins said that Mrs. Johnson made progress while under his care and her health fell off when he ceased attending her, and she had actually thanked him for what he had done for her. His Honour said that the defendant, having placed confidence in Mr. Collins and having called him in, must pay for his services and judgment for the plaintiff was given accordingly.

CHRONIC JAUNDICE WITHOUT BILIARY PIGMENT IN THE URINE.

AT the meeting of the Société Médicale des Hôpitaux on March 24th M. M. G. Hayem read a note on this subject. At the meeting of May 14th, 1897, he showed a patient with a peculiar form of jaundice characterised by a special colouration of the skin and especially by the absence of bile from the urine although there was pigment in the blood which gave Gmelin's reaction. He thought that this kind of jaundice was not rare. He had already observed several cases but with partial colouration of the skin. In such the yellow chamois-leather colour was most appreciable on the palms of the hands and at the phalangeal and metacarpo-phalangeal joints. The patient referred to had fairly deep generalised jaundice. This was the first case of the generalised form observed by M. Hayem but he subsequently encountered four cases. Its characteristics were always the same. It was rather a sub-icterus than a well-marked icterus. In all the cases the urine was free from biliary pigment and the jaundice developed slowly and insidiously and once installed was persistent. The duration of this affection is for the present undetermined. The colour varied; at times it was more intense, at others it tended to disappear, but it never vanished completely. Out of five cases the liver was a little enlarged in only two, and that temporarily; it extended about an inch below the false ribs but remained supple and was not tender. Enlargement of the gall-bladder or hepatic colic was never observed. The spleen always appeared normal. The colour of the fæces was not altered. All the patients were dyspeptic and presented the characteristic signs of parenchymatous gastritis of a chemical type corresponding to one of the forms of hyperpepsia. In all there were nervous phenomena with predominance of neurasthenic symptoms—fatigue, inaptitude for work, wasting, irritability, and mental depression. M. Hayem thought that this variety of jaundice was one of the complications of the common nervous form of mixed parenchymatous gastritis, which is most usually found in those who have hyperpepsia. Probably it was due to a slight secondary infection of the biliary passages from the duodenitis which regularly accompanies gastritis.

SOCIETY OF MEMBERS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

A MEETING of the committee of this society was held on May 30th to consider the proposal of the College Council to apply for a supplementary Charter in celebration of the centenary of the granting of the original Charter in 1800. The opinion was generally expressed that this would be a suitable occasion for settling the long-standing controversy regarding the representation of Members. It was agreed to present a memorial to this effect to the Council of the College and the question of the form which this should take was adjourned to the next meeting. It was noted that the Council intended to call a general meeting to consider the matter, but it was thought desirable to appeal to them to submit some definite scheme for a settlement and to include it in the Charter.

THE PROTECTION OF UNDERGROUND WATER-SUPPLIES.

ANY attempt to protect our water-supplies obviously deserves a prominent place in the consideration of public health affairs. In the past few years we have had some sharp and striking lessons of the importance of securing the environment of the source of a water-supply against any possible chance of contamination. Indeed, so serious may be the consequences of an underground water-supply being polluted that the subject calls for legislative control. As Dr. Thresh has pertinently pointed out in a paper which he read before the Society of Engineers some time ago, and which we are glad to see has recently been published in the form of a pamphlet, "if any immediate legislation is needed it is not so much to control large water companies as to enable sanitary authorities to deal with shallow well-supplies by making by-laws for regulating their construction and situation and for effectively dealing with the immense number of defective ones already in existence." As a rule the well-sinker is deaf to the possibilities of pollution and he seldom constructs a well which may be regarded as free from the risk of inflowing contaminated matter. In the case of deep wells steps should be taken similarly to block out water from superficial strata, while for further security there should again be a small protective zone kept free from all pollution. It is well known that where the subsoil is fissured the danger of pollution is greater and protection is more difficult, and in such a case it is not so easy

to trace the source of danger. Such a possibility emphasises the necessity of making chemical and bacteriological analyses more frequently and more regularly. Too much importance cannot be attached to making also a frequent and regular inspection of the source and surroundings. This should be enforced by a public health department of administration, so that efficient protection could be insisted upon, as well as provision for ample protective areas. In this way there would be every chance of the epidemic prevalence of water-borne diseases, such as cholera and typhoid fever, being very distinctly checked, if not stamped out.

SEAMEN'S HOSPITAL SOCIETY.

SIX of the appointments advertised as vacant on the staff of the Seamen's Hospital Society have been filled up as follows:—Physicians: Dr. R. Tanner Hewlett and Dr. Guthrie Rankin. Surgeons: Mr. James Cantlie and Mr. J. Brian Christopherson. Ophthalmic surgeon: Mr. L. Vernon Cargill. Superintendent and medical tutor of the London School of Tropical Medicine: Mr. David Charles Rees.

THE SANITARY CONDITION OF ST. PANCRAS.

TOWARDS the end of the year 1897 a report on the subject of tenement houses in London occupied by the poorer classes was prepared by Dr. W. H. Hamer, assistant medical officer of health to the London County Council. With reference to the parish of St. Pancras Dr. Hamer stated that he found a number of houses let out in lodgings which ought to be put on the register and kept under regular inspection, but that the staff of inspectors was not sufficient for the proper performance of such a duty. Dr. Hamer's report was considered by the Health Committee of the vestry who recommended that "two additional inspectors should be appointed." This recommendation was considered by the vestry on March 30th, 1898, but was not adopted. The London County Council in considering the minutes of this meeting instructed Dr. Hamer to make a further report, and this further report, together with a letter from Mr Shirley Murphy, was transmitted to the vestry on Oct. 20th, 1898. The report recommends at least seven additional inspectors and the Health Committee recommended its adoption. The matter was, however, referred to a special committee whose report is now before us. The committee take exception to some of Dr. Hamer's statements as being liable to misconstruction, but they allow that overcrowding does exist. They, however, maintain that the strict enforcement of the by-laws as to overcrowding really involves the whole problem of re-housing—a problem which at present they do not feel capable of solving. With regard to the health department of the parish the committee find that its organisation was, "to say the least, somewhat faulty." They recommend that the medical officer of health be instructed to efficiently supervise the work of the sanitary inspectors both indoors and out of doors. They also recommend that the medical officer of health should resign the post which he now holds at Guy's Hospital. With regard to house registration and inspection Dr. Hamer reported that there should be some 2000 houses on the register which at present are not so and the committee recommend that the medical officer of health should himself make the preliminary inspections. Two additional sanitary inspectors should be appointed, but the committee cannot agree that seven are necessary. The report was presented to the vestry on May 10th, 1898, and was adopted without amendment, and we cannot but think that the vestry has done wisely, for it is obvious from the committee's report that the sanitary organisation of the parish was very far from perfect. St. Pancras is, of course, by no means an easy area to deal with, but it is useless for a local governing body to shut its eyes to the fact that abuses do exist. St. Pancras devoted his whole fortune to the relief of the poor and needy in Rome, and those who govern the parish dedicated to him should see that their poor have a chance of living comparatively decent and healthy lives.

THE ILLEGITIMATE USE OF FOOD PRESERVATIVES.

THE question of placing the use of food preservatives under control is practically *sub judice*, since a Departmental Committee is considering the subject at the present time in connexion with the new Sale of Food and Drugs Bill. We are inclined to the view that sundry preservatives may be permitted subject to regulation and certain conditions. Some antiseptics should be absolutely prohibited as having been definitely proved to be injurious to man or as exercising an objectionable effect upon food. In the same way the treatment of stale or even unwholesome food with "correctives" to give it the appearance and possibly the taste of the fresh article cannot be countenanced. On this point we have received an important communication from a correspondent who has found several times recently a defect in "fresh" meat and more especially in "fresh" fish as served in some very good restaurants in London and Paris, which he considers (and he is probably right) as a recent development of an effort to preserve such eatables after they have become unfit for human food. Such dishes while not seemingly stale either to the sense of taste or smell have a flavour which he compares to the smell of ether and if eaten they leave a persistent bitter taste in the mouth. He states that in his own case these unpleasant impressions last for two days. The antiseptic referred to is probably formalin which, in our opinion, should on no account be tolerated as a food preservative for the simple reason that it acts upon the flesh-forming constituents of food in a way which renders them tough and indigestible. Nothing could be more instructive than the experimental evidence which shows that the proteids of milk containing formalin fail to yield to the digestive action of pepsin. This is a very serious point, especially when we consider the possibility that foods so treated and thus rendered worse than valueless may be given to invalids or to infants. We earnestly commend this matter to the attention of the Departmental Committee to which we have just now referred.

REMOVAL OF THE TRANSVERSE COLON AND PARTIAL RESECTION OF THE PANCREAS AND STOMACH FOR CARCINOMA.

IN the *St. Paul Medical Journal* for March Dr. A. Schwyzer has published a case in which this remarkable and possibly unique operation was performed. A man suffered from abdominal pain and passed shreddy masses, partly whitish, partly bloody. He became steadily weaker. In the umbilical region was a hard moveable mass directly under the thin abdominal wall. Carcinoma of the transverse colon was diagnosed. Laparotomy was performed by a median incision in the umbilical region. The transverse colon was represented by a tumour of twice the size of a fist. It was intimately connected with the stomach for a length of four inches. As the fate of such cases is pitiable it was decided to attempt removal if only for temporary relief. The stomach was separated from the tumour by dividing the gastro-colic ligament and resecting the large curvature for about seven centimetres. The wound was closed by a double continuous suture. The meso-colon was then divided to the left of the tumour and the gut was clamped and divided. In further separating the growth profuse venous

hæmorrhage occurred which must have come from the inferior mesenteric vein or one of its branches. The hæmorrhage was difficult to arrest. As fatal disturbances were feared from complete transverse ligation three artery forceps were applied to the wound which was sutured, leaving as much of the lumen of the vein as possible. The apex of the tumour was then found to extend into the pancreas which had to be resected. Alarming hæmorrhage then occurred from the superior mesenteric vein which was controlled by a few forceps. The remaining small portion of the pedicle was divided and the hepatic flexure of the colon was cut across between clamps. Access was then possible to the wound in the vein which was sutured. The divided ends of the colon were united by a continuous double silk suture. The upper portion was hypertrophied and dilated and its circumference was greater than the lower portion in the proportion of three to two. This difficulty was surmounted by stretching the lower portion while suturing. Recovery ensued. Microscopic examination showed that the tumour was a myeloid carcinoma. Four months after the operation the patient felt well; he was free from pain and had gained 25 lb. in weight.

PARALYSES AND PSYCHOSES FOLLOWING PROLONGED ANÆSTHESIA.

THE paralyses and psychoses of limited extent which follow prolonged anæsthesia are infrequent but of great practical importance. Louis Moret [1] gives an interesting study and record of paralyses following general anæsthesia produced by chloroform or ether, having no relation to the region operated on, and being dependent upon effects produced on the nervous system, peripheral or central. Garrigues [2] was one of the earliest to study and record cases of peripheral paralyses following anæsthesia, and Schwartz at the Annual French Surgical Congress at Lille, 1897, gave a *résumé* of all the facts then known. It is necessary to discriminate between true paralysis and that from compression of peridheral nerves during the operation. Compression may be brought about by elastic bands—e.g., Esmarch's bandage—or from pressure of nerves between bones—e.g., between the clavicle and the first rib—in which latter case a paralysis of the arm may result. These are peripheral paralyses. The other class comprises central paralyses. These may occur under the form of facial paralysis, hemiplegia with or without aphasia, or some other focal paralysis from cerebral lesion In some of these cases lesions, generally in the forms of hæmorrhage or softening, have been found in the cerebral hemispheres. A third class includes indeterminate paralyses. 1. Of the three kinds, the first (peripheral paralysis) follows anæsthesia of long duration where the patient's body and limbs have been placed in forced or strained attitudes and subjected to compression against the operating-table or by the use of Esmarch's bandage. When the anæsthesia is over the paralysis shows itself and usually in a single limb or affecting a segment of a limb only. No sensorial troubles are found nor is there evidence of persistent peripheral neuritis. The reflexes are preserved, but where the brachial plexus has been pressed upon, an ocular symptom—viz., myosis—may be present on the affected side. 2. The central paralyses are rarer than those of the type just described and generally occur in women. Thus, out of a total of 12 recorded cases 11 were those of the female sex. There is a partial ictus or stroke found to occur during the anæsthesia, and on recovering from the anæsthetic or shortly after and within a few hours the paralysis makes its appearance. The clinical types are monoplegic, facial, hemiplegic, or disseminated. Necropsies generally show that the central lesion is associated with a pre-existing arterio-sclerosis or atheromatosis and that it takes the form of hæmorrhage or softening which may be brought about in the following way. The anæsthetic acts in the first instance by producing relaxation of the cerebral vessels (vascular dilatation and atony) during the preliminary period of excitation from the chloroform or ether vapour, while efforts on the part of the patient, such as cries and struggles, and in some cases vomiting, provoke further vascular congestion followed by rupture (hæmorrhage) or by thrombosis or embolism. It is found that Trendelenburg's position in gynæcological operations favours the occurrence of cerebral paralysis owing to its proneness to bring about the causes mentioned. 3. The toxic action of the anæsthetic on the nerve-centres also plays probably a minor part in determining some of the less known and more obscure paralyses. The subjects who suffer, however, from psychoses and serious mental disturbances following surgical anæsthesia have a hereditary predisposition to mental derangement. In such cases there may be a more or less marked loss of memory (amnesia) lasting some days, while in others again the cerebral disease takes the form of delirium and mental confusion. In these cases and in cases of an hysterical nature local paralyses may also appear with motor signs comparable to hystero-traumatic palsies. Such troubles are never observed in children (according to Professor Joffroy of Paris) [3] and indicate the probable "hysterical" nature of the paralysis. Finally, it is to be noted in regard to the last class of post-operative psychoses that Dr. Granjux of Paris,[4] an army medical officer, has not observed any such psychoses among soldiers, and this immunity is probably due to the special care exercised in the selection of soldiers which eliminates predisposition.

[1] Thèse de Paris, December, 1898.
[2] American Journal of the Medical Sciences, 1897, p. 81.
[3] Proceedings of the Congress of French Alienists and Neurologists held at Angers, August, 1898.
[4] Ibid.

SANITATION IN YUCATAN.

IN Merida, the capital of Yucatan, a city possessing 45,550 inhabitants, the sanitary problem is one of exceptional difficulty on account of the extreme flatness of the locality and the perennially saturated condition of the subsoil. Situated some 20 miles from the coast Merida stands only about 25 feet above sea-level in the centre of a vast plain of which the exact geological character has not been determined. There are no rivers or streams of any kind throughout the entire province, but so porous is the surface that storm water almost instantly sinks out of sight without, however, perceptibly affecting the height of the underlying aqueous stratum which is said to remain pretty much at the same level all the year round. The city covers a considerable area and is subdivided into squares and parallelograms by wide but unpaved and very ill-kept streets. The houses of well-to-do citizens are for the most part spacious, single-storeyed, flat-topped edifices, built of calcareous stone, but the poor live in what are described as "veritable hovels, containing each one room only, which has to serve the family as kitchen, dining-hall, and dormitory." Every habitation, large or small, has more or less curtilage and garden, and hitherto it has been the custom to deposit slops and night-soil in a small yard or enclosure where percolation and solar desiccation are relied on for their innocuous dispersal. Such from time immemorial has been the universal practice in Merida, for in the eyes of the multitude what was good enough for their fathers is likewise good enough for them; but a short time ago it occurred to an enlightened municipality that although the subsoil of their city was undoubtedly long-suffering there was possibly, if not probably, a limit beyond which its continual befouling could not be carried without disastrous consequences. A commission of

experts was accordingly appointed to study the question of sewerage seriously, a French engineer named Duvernail being placed at the head of affairs, but up to the present time nothing definite has been concluded except that the difficulties surrounding the undertaking are almost insurmountable. We are indebted for the foregoing particulars to a communication recently made to the Société Française d'Hygiène by Dr. J. Patron Espada, a member of the professorial staff at the Medical Faculty of Yucatan. As depicted by Dr. Espada this portion of Mexico is still suffering from the effects of former political troubles. In 1847 the population of the province was 600,000, but owing to internecine racial war and also partly to several epidemics of yellow fever it has been diminished by nearly a half. To recover from such severe depletion requires time, but there is every reason now to hope that better things are in store. The climate is good if hot, and in other respects the natural advantages of the country are considerable. All that is wanted is firm, enlightened government, and apparently the materials for this are at hand.

MESOPOTAMIAN MEDICINE.

UNTIL recently the only evidence as to the state of medical knowledge in ancient Babylonia and Assyria was derived from the lists of ailments preserved in the so-called magical cuneiform tablets which consist of conjurations against various diseases or injuries and the respective demons supposed to be responsible. Now, however, that the study of cuneiform writing has advanced and the number of texts published becomes much greater documents are coming to light appertaining to medical matters. An American student, Dr. Christopher Johnston, has paid some attention to them and from his researches the following notes are mainly derived. From Assurbannipal's library have come several letters from physicians of which four or five are from one name, Arad-nana. One of these is a report to the king of his brother's health. A more interesting relic is a tablet regarding a person who seems to have been suffering from facial erysipelas, though it may have been a case of ophthalmia. The letter, omitting the customary address to Royalty, is as follows: "All goes well in regard to that poor fellow whose eyes are diseased. I had applied a dressing covering his face. Yesterday towards evening undoing the bandage which held it I removed the dressing. There was pus upon it the size of the little finger tip. All is well. Let the heart of my lord the king be of good cheer. Within seven or eight days he will be well." Another letter runs thus: "With regard to the patient who has a bleeding from the nose, yesterday there was much hæmorrhage. Those dressings are not scientifically applied. They are placed upon the alæ of the nose, oppress his breathing, and come off when there is hæmorrhage. Let them be placed within the nostrils then the air will be kept away and the hæmorrhage restrained. If it is agreeable to my lord the king I will go to-morrow and give instructions: meantime let me know how he does." This is evidently an instance of a patient suffering from epistaxis. External compression had been tried and failed whereas plugging the nares is recommended. The name of another Assyrian physician, Iquisa-Aplu, is known because he was by Royal command sent to minister to a famous general named Kudunu who lay ill at Erech and he was able to report that he had cured his patient.

TRIBROMOPHENOL BISMUTH IN THE CUBAN CAMPAIGN.

DR. EMILIO PÉREZ NOGUERA communicates to a Spanish medical journal an account of his successful treatment of wounds in the Cuban campaign by means of perchloride of mercury and tribromophenol bismuth or xeroform. This substance is a yellowish, tasteless, amorphous powder with only a slight odour, which has been recommended for internal use as an intestinal antiseptic. It is non-toxic but has very highly bactericidal powers as a 2 per cent. addition of it to a culture medium will destroy the anthrax bacillus, which a 5 per cent. admixture of iodoform will not do. In gunshot wounds Dr. Noguera first employed prolonged irrigation with a perchloride of mercury solution of the strength of one in 1000. He then covered the orifices of entrance and exit with a thin layer of xeroform, the whole being enveloped in sublimate gauze and carbolised cotton-wool, this dressing being changed whenever signs of moisture could be detected coming through it. Under this treatment wounds healed in a most satisfactory manner without any pus, 20 or 30 days being the longest time required when the soft parts only had been injured. In the case of wounds inflicted by the cutlass the same irrigation was practised and the edges were brought together with sutures, xeroform being dusted over the surface and a dressing applied as in the case of gunshot wounds. All the cases treated in this way healed by first intention in from one to three weeks. In one case where it was impossible to bring the lips of the wound into apposition owing to there being a loss of substance the wound granulated up from the bottom without the formation of pus, healing being complete by the end of a month. No toxic effects were observed in any of the cases nor was there any tendency to form exuberant granulations. In order to see whether an absolutely dry treatment, such as could be applied on the field of battle, would succeed Dr. Noguera selected three fresh cases of gunshot wounds without injury to any important organ, and instead of immediately irrigating them he simply swabbed them out as far as possible with cotton-wool dusted over with xeroform and dressed them with gauze and cotton-wool. One of these was left for 48 hours and the other two for three days, all being in an aseptic condition when opened. He also found that when a number of wounded were brought into close proximity xeroform dressings prevented any of them infecting others. Altogether he is strongly of opinion that this substance is very suitable for use in military surgery.

THE RECENT FATAL AMBULANCE ACCIDENT IN LIVERPOOL.

THE coroner for Liverpool, Mr. T. E. Sampson, held an inquiry on May 25th into the cause of the deaths of Michael Quinn, aged 45 years, and John Young, a member of the Liverpool mounted police. The origin of the fatalities was as follows. Quinn was walking along the street and either fell in front of, or was knocked down by, a hansom cab, one wheel of which went over him. A police constable said that he was called to Quinn whom he found lying unconscious in the roadway. After rendering first aid he sent for the ambulance which arrived from the Stanley Hospital and was driven by the deceased man Young. Witness and Mr. Paddock got Quinn into the ambulance and they started for the hospital. He noticed that they were going very fast and both he and Mr. Paddock shouted to Young to go more slowly. Then it occurred to him that the horse had run away and presently they were overturned. They got Quinn out and after that he remembered nothing more. Charles Mallon, a dock labourer, deposed that he saw the ambulance overturned through the horse running away and colliding with a lamp-post. Young was thrown into the road on the top of his head. The regular driver of the ambulance said that the horse was quite quiet and steady, but he thought the driving seat of the ambulance was too high up. Another constable gave evidence that the horse had only one eye. Medical evidence was given to the effect that both

Young and Quinn died from fracture of the base of the skull and Mr. Paddock said that he thought that Quinn's fracture took place in the original accident and not when he was upset in the ambulance accident. Young was a perfectly steady driver. The jury returned a verdict of "Accidental death," but considered that a one-eyed horse was not a proper animal to use for ambulance work. So far as we can judge from the reported evidence this was the only verdict which could be arrived at, for there seems to be no foundation for the suggestion that Young was guilty of reckless driving. Though there can be no doubt that the ambulance accident did not improve Quinn's chances of recovery it is pretty certain that he received his fatal injury from the cab or the fall. He was found unconscious when picked up, so probably the effects of the injury had already begun to assert themselves.

HIS old house surgeons at St. Thomas's Hospital entertained Sir William Mac Cormac to dinner at the Café Royal on May 24th in honour of his third year of tenure of the office of President of the Royal College of Surgeons of England. 77 gentlemen assembled to do honour to their former teacher and the guest of the evening was presented with an illuminated album (decorated with a drawing of the hospital and a small vignette of a field hospital) containing the signatures of the house surgeons and assistant house surgeons of St. Thomas's Hospital between the years 1870 and 1894 and headed by the following short address: "We take this opportunity of expressing our admiration of your services to the advance of the science of surgery in the hospital and on the field of battle, your unwearied efforts to promote the objects of the medical profession and maintain its high status, your services to St. Thomas's Hospital and its Medical School, and your unvarying kindness and efforts to help your pupils and juniors." The chair was taken by Mr. G. C. Franklin of Leicester, and the gathering formed a striking proof of the regard felt for Sir William Mac Cormac by his former pupils.

UNDER the auspices of the Early Closing Association a League has been formed to secure seats for young women in shops. The Duke of Westminster, the Bishop of London, and the Dean of Westminster are patrons of the League, of which the Right Hon. Sir John Lubbock, Bart., M.P., is president, and Mr. A. Cameron Corbett, M.P., is chairman. On Thursday, June 8th, at 4 P.M., the first meeting of the League will be held in the Jerusalem Chamber of Westminster Abbey and the Dean of Westminster has kindly promised to give a few interesting historical facts about the Chamber and Abbey prior to the meeting. Applications for tickets should be made to the offices of the Early Closing Association, 21, New Bridge-street, E.C.

AT a special meeting of the St. Olave's (Southwark) Board of Works held on Tuesday last the Board displayed considerable resentment at the alleged illegal removal of bodies from the crypt of St. Thomas's Church without their authority. It is not clear to us what their authority in the matter is, but Dr. W. A. Bond, the medical officer of health, who had assisted the Bishop of Southwark to carry out what seems to have been a proper and decent sanitary measure, has been temporarily suspended from his duties. The Board are quite angry, but it remains to be seen if they are correct or reasonable.

DR. J. BUCKLEY BRADBURY, Downing Professor of Medicine in the University of Cambridge, will deliver the Croonian Lectures on Some Points connected with Sleep, Sleeplessness, and Hypnotics at the Royal College of Physicians of London on June 20th, 22nd, 27th, and 29th at 5 P.M.

T.R.H. THE DUKE AND DUCHESS OF YORK have arranged to open the new homes of the National Society for Employment of Epileptics at Chalfont St. Peter on Friday, June 23rd, instead of June 22nd as previously arranged.

WE regret to have to announce the death of Dr. Norman Kerr which occurred on Tuesday night last at Hastings, where he had resided since the beginning of this year. He had been for some time in failing health.

THE Congress of the Royal Institute of Public Health will be held in Blackpool this year from Sept. 21st to Sept. 26th inclusive under the presidency of the Marquis of Lorne.

THE Woodford Jubilee Hospital was declared open on Thursday, June 1st, by T.R.H. the Duke and Duchess of Connaught.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Liverpool Port District.—The tidal inspection of vessels arriving in the Medway is carried out by two medical officers, one of whom takes each tide, the Customs launch being utilised for inspectorial purposes. Over and above these medical inspections there were made by the port sanitary inspector during 1898 5064 visits or re-visits, the actual number of vessels inspected being 3231. The number and variety of defects detected are shown in the following table:—

Defects of original construction.	Per cent.	Structural defects arising from wear.	Per cent.	Dirt and other conditions prejudicial to health.	Per cent.
150	4·4	883	26·3	2322	69·2

There were 87 cases of infectious disease landed at the port of Liverpool during 1898, the bulk of them being small-pox, enteric fever, or varicella. The number of emigrants (98,900), though considerably in excess of that for 1897, was much below the average, and it is of interest to note that of the total number passing through Liverpool 68,468 were bound for the United States, while only 25,644 went to Canada.

Cheltenham Urban District.—The population of this district is now apparently again on the increase and Dr. J. H. Garrett expects that the census of 1901 will yield the 50,000 necessary to convert Cheltenham into a county borough. During 1898 the general death-rate of the district was 16·4 and the birth-rate 22·2 per 1000, the zymotic death-rate amounting to 1·06 per 1000 and the infantile mortality to 146 per 1000 births. The disposal of the sewage of Cheltenham does not seem to be carried out as well as could be wished, the tenants who rented some of the sewage farms or who used the sewage having, it is said, had an eye rather to profit than to sewage purification. The corporation will in future carry on the farming operations by the aid of a bailiff. The water-supply, too, again ran short during the year and the Severn at Tewkesbury had to be drawn upon. Dr. Garrett is clearly averse to the proposal which has apparently been seriously made of laying down a new pipe with the view of pumping unfiltered Severn water to the Dowdeswell reservoirs. The private slaughter-houses in Cheltenham are vanishing but all too slowly, the Provisional Order conferring upon the town council power to close such slaughter-houses being found

difficult to put into operation owing to the compensation clause contained in it. Dr. Garrett thinks that it would have been preferable had the council been given power to close all the old slaughter-houses at the end, say, of 10 years.

Brighton Sanitary District.—The Registrar-General estimated the population of Brighton at the middle of 1898 at 122,430, the birth-rate for the year being 24·8 and the death-rate 16·7 per 1000. The zymotic death-rate was 2·33 per 1000 and the infantile mortality 179 per 1000 births. As regards the notification of infectious diseases Dr. Newsholme furnishes in his report a table showing the annual cost per 1000 of the population since the adoption of notification in 1892, the fees for 1899 being at the rate of 18*s.* per 1000 of the population. In dealing with the subject of enteric fever Dr. Newsholme reports that of the 98 cases which originated in Brighton during 1898 the evidence furnished was to the effect that in 54 cases no shellfish had been eaten during the three weeks preceding the onset of the disease; in three cases there was doubt on this point, while in 28 cases oysters and in 13 cases mussels, which were proved in the majority of cases to have been derived from a grossly contaminated source, had been eaten within three weeks prior to the onset—i.e., in 41·8 per cent. of the total number of cases originating in Brighton sewage-contaminated shellfish were not improbably the source of the disease. Dr. Newsholme will doubtless welcome the appearance in the House of Lords of the Oysters Bill, and it will be interesting to observe, if the Bill becomes an Act, what effect will be produced upon the prevalence of enteric fever in Brighton. Touching the question of the prevention of tuberculosis the town council invite tenders for the supply of milk to the borough sanatorium on the following conditions: 1. That the contractor shall furnish to the medical officer of health certificates from a qualified veterinary surgeon to the effect that (*a*) the cows from which the milk-supply is obtained have been subjected to, and failed to react to, the tuberculin test; (*b*) that all reacting animals have been removed from the byres and the latter cleansed and disinfected; and (*c*) that all new cows purchased from time to time during the period of the contract have been similarly tested. 2. That the contractor shall not supply milk from any other source than the one defined above without the special permission of the medical officer of health. Dr. Newsholme, under the heading of "The Manufacture of New Slum Property," draws attention to the enormous expense of removing insanitary areas under Part I. of the Housing of the Working Classes Act, 1890, and he insists upon the great importance of preventing any fresh insanitary areas from growing up. In his report on the work of the municipal hygienic laboratory, which appears to have been of great assistance during the year, an instance is referred to in which Widal's reaction failed on two occasions to show itself although the patient in question had apparently a well-marked attack of enteric fever.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN 33 of the largest English towns 5668 births and 3496 deaths were registered during the week ending May 27th. The annual rate of mortality in these towns which had been 17·7 and 17·6 per 1000 in the two preceding weeks, further declined last week to 16·0. In London the rate was 15·7 per 1000, while it averaged 16·2 in the 32 provincial towns. The lowest rates in these towns were 10·4 in West Ham, 10·8 in Gateshead, 11·1 in Huddersfield, and 11·2 in Cardiff and in Halifax; the highest rates were 20·4 in Oldham, 20·8 in Liverpool, 21·3 in Preston, and 21·4 in Manchester. The 3496 deaths included 351 which were referred to the principal zymotic diseases, against 365 and 355 in the two preceding weeks; of these, 119 resulted from measles, 84 from whooping-cough, 59 from diphtheria, 41 from diarrhœa, 27 from scarlet fever, 16 from "fever," (principally enteric) and five from small-pox. No death from any of these diseases was recorded last week in Halifax; in the other towns they caused the lowest death-rates in Brighton, Blackburn, Bristol, and Norwich, and the highest rates in Nottingham, Hull, Manchester, and Burnley. The greatest mortality from measles occurred in Nottingham, Manchester, Salford, and Sunderland; and from whooping-cough in Plymouth, Wolverhampton, and Burnley. The mortality from scarlet fever and from "fever" showed no marked excess in any of the large towns. The 59 deaths from diphtheria included 23 in London, five in Leicester, five in Sheffield, and three in Leeds. Four fatal cases of small-pox were registered in Hull and one in Oldham, but not one in London or in any other of the 33 large towns; and only one small-pox patient was under treatment last week in the Metropolitan Asylums Hospitals. The number of scarlet fever patients in these hospitals and in the London Fever Hospital on Saturday last, May 27th, was 2201, against 2210 and 2161 at the end of the two preceding weeks; 229 new cases were admitted during the last week, against 219, 259, and 211 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London which had been 257 in each of the two preceding weeks were 256 last week and were 32 below the corrected average. The causes of 42, or 1·2 per cent., of the deaths in the 33 towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Leicester, Nottingham, Leeds, and in 13 other smaller towns. The largest proportions of uncertified deaths were registered in West Ham, Liverpool, Sheffield, and Sunderland.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 18·5 and 19·0 per 1000 in the two preceding weeks, declined again to 16·9 during the week ending May 27th, but exceeded by 0·9 per 1000 the mean rate during the same period in the 33 large English towns. The rates in the eight Scotch towns ranged from 8·5 in Greenock and 13·9 in Aberdeen to 20·3 in Paisley and 22·0 in Perth. The 516 deaths in these towns included 19 which were referred to diarrhœa, 17 to whooping-cough, 11 to measles, three to scarlet fever, one to diphtheria, and one to "fever." In all, 52 deaths resulted from these principal zymotic diseases against 53 and 60 in the two preceding weeks. These 52 deaths were equal to an annual rate of 1·7 per 1000, which was slightly above the mean rate last week from the same diseases in the 33 large English towns. The fatal cases of whooping-cough, which had been 10 and 12 in the two preceding weeks, further rose to 17 last week, of which four occurred in Glasgow, four in Edinburgh, four in Leith, and three in Dundee. The 11 deaths referred to measles showed a marked further decline from the numbers recorded in recent weeks, and included nine in Glasgow. The fatal cases of scarlet fever, which had been three and eight in the two preceding weeks, declined again to three last week, of which two occurred in Glasgow. The death from diphtheria was registered in Aberdeen and the fatal case of "fever" in Paisley. The deaths referred to diseases of the respiratory organs in these towns, which had been 97 and 103 in the two preceding weeks, declined to 80 last week, and were 45 below the number in the corresponding period of last year. The causes of 24, or nearly 5 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin which had increased in the three preceding weeks from 24·8 to 26·8 per 1000 declined again to 26·5 during the week ending May 27th. During the past four weeks the rate of mortality in the city has averaged 26·2 per 1000, the rate during the same period being 16·1 in London and 17·2 in Edinburgh. The 178 deaths registered in Dublin during the week under notice were within two of the number in the preceding week, and included seven which were referred to the principal zymotic diseases, against eight and seven in the two preceding weeks; of these four resulted from "fever," one from measles, one from whooping-cough, and one from diarrhœa, but not one either from small-pox, scarlet fever, or diphtheria. These seven deaths were equal to an annual rate of 1·0 per 1000, the zymotic death-rate during the same period being 1·6 in London and 0·9 in Edinburgh. The four deaths referred to different forms of "fever" exceeded the number recorded in any week since the beginning of April last; while the mortality from measles and from whooping-cough showed a decline from that recorded in the preceding week. The 178 deaths in Dublin last week included 29 of infants under one year of age and 45 of persons aged upwards of 60 years; the deaths of infants showed an increase, while those of elderly persons corresponded with the numbers recorded in the preceding week. Three inquest cases and five deaths from violence

were registered; and 68, or more than a third, of the deaths occurred in public institutions. The causes of 7, or nearly 4 per cent., of the deaths in the city last week were not certified.

THE SERVICES.

ROYAL NAVY MEDICAL SERVICE.

THE following appointments are announced:—Staff Surgeons: J. McC. Martin, D.S.O., to the *Trafalgar* and W. Bowden, D.S.O., to the *Edgar*. Surgeons: A. Woollcombe to the *Edgar*; L. Bidwell to the *Lion*; and A. G. Eastment to the *Wildfire*, for disposal.

ROYAL ARMY MEDICAL CORPS.

Captain C. B. Martin is posted to the Station Hospital, Western Heights, Dover. Major H. A. Cummins has joined at Woolwich and Captain S. H. Withers has proceeded to Lydd for medical charge of the Station Hospital and troops there. Lieutenant-Colonel William J. Fawcett to be Colonel, vice J. Fraser, deceased.

INDIA AND THE INDIAN MEDICAL SERVICES.

The services of Captain F. H. Watling (Bengal), are placed temporarily at the disposal of the Chief Commissioner of the Central Provinces. The services of Captain E. A. R. Newman (Bengal) are placed temporarily at the disposal of the Government of Bengal. Captain H. Burden (Bengal) is appointed to be an Agency Surgeon of the Second Class and is posted as Assistant Agency Surgeon in Gilgit. Captain H. E. Drake-Brockman (Bengal) is appointed to be an Agency Surgeon of the Second Class.

ARMY MEDICAL RESERVE OF OFFICERS.

Surgeon-Captain A. A. Abraham to be Surgeon-Major.

SANITATION IN TONGKING.

In a recently published report[1] Dr. Fruitet of the French navy describes the circumstances under which a small epidemic broke out in September, 1895, at the military post of Lao-Kay (Low Kai) on the Chinese frontier in Tongking. The symptoms observed were cramps in the calves of the legs, vomiting, coldness, and diarrhœa, but in the reporter's opinion as well as in that of two other medical officers the disease was not cholera. The outbreak was spread over 10 days, 21 cases in all occurring with 15 deaths. 12 legionaries (Europeans) who were among the attacked are described as worn out, saturated with malaria (*impaludés*), and nearly all alcoholised. Of these men seven died. The garrison at Lao-Kay, consisting of legionaries, native levies, and prisoners, occupied an old Chinese fort where ventilation was rendered difficult, "if not impossible," by an encircling wall against the outer face of which two filthy Annamite villages were promiscuously huddled. The overcrowding in the sleeping rooms was excessive, the space between the men's beds being only 50 centimetres, or about a foot and a half; while to make matters worse the bedding and mattresses had not been changed or re-made for five or six years. Under these circumstances Dr. Fruitet came to the conclusion that he had to do with pernicious gastro-enteric fever dependent primarily on impaludism—to use Dr. Fruitet's words. These cases were probably grave forms of malarial poisoning somewhat simulating cholera, such as have occurred in an Indian experience in the valley of Peshawar for example. Had the affection been cholera he thinks that out of a total population of 604 persons more than 21 would have suffered. Moreover, cholera is not endemic in the district and has never been seen at Lao-Kay since the post was first occupied 10 years ago. The disease always follows watercourses, but he was assured that all the villages situated up-stream were uncontaminated. It was true that a possible source of infection existed in a numerous band of coolies who had lately been brought up to the post from the Hanoi delta by a contractor who had undertaken to build new barracks, but so far as Dr. Fruitet was aware there was nothing to show that cholera had ever appeared among them. On the whole, although the mere enumeration of the symptoms would inevitably lead persons at a distance to suspect cholera, he felt quite certain that such was not the case, one very important differential sign being the character of the patients' dejections which were scanty and bore no resemblance to rice-water. Prior to the outbreak the water-supply for the fort was drawn from the river close to the bank and after boiling was stored in barrels which were made to act as filters by means of layers of sand, gravel, and charcoal. This system failed to meet with Dr. Fruitet's approval. He condemned the filters altogether, arranged for an in-take nearer mid-stream, and as Chamberland's filters were not available recommended that whatever was left of each day's supply of boiled water should be thrown away having first been utilised for washing out the receptacles. With regard to latrines he advised the suppression of all except those used by the legionaries, but that the native levies should be allowed to use these at night. In the daytime the latter should resort to the river where rafts should be moored for them and also for the inhabitants of the villages who heretofore were in the habit of frequenting the jungles—a most reprehensible practice according to Dr. Fruitet.

[1] Archives de Médecine Navale, April, 1899.

SOLDIERS' AND SAILORS' HOME AT MALTA.

We heartily concur in the proposal to start a home for soldiers and sailors in a central part of Valetta, Malta. We already have these homes in large garrisons in this country and in a few of our colonies while soldiers' institutes have been established in India. Even apart from the Mediterranean Squadron the strength of the military garrison of Malta is such as to fully warrant the provision of some establishment of the kind there. A service club where men can meet together for social intercourse, if properly managed, is a great convenience and boon to soldiers and sailors, to say nothing of its wholesome influence. Valetta is pretty full of drinking places where their customers are not only supplied with cheap and inferior liquors but run the risk of encountering much that does not make for health.

THE PEACE CONGRESS.

The proceedings of the Peace Congress regarding the Russian proposals are being conducted in a practical and businesslike spirit and there is every probability that the Conference will agree, at any rate, on the establishment of a permanent central International Bureau and the formulation of some arbitration scheme out of the various proposals submitted by the representatives of the different Powers. As regards a number of other points, however, the issue is very doubtful and it is probably futile to expect agreement and practical action; still, even if the result of the Conference be limited to the foregoing and to some extension of the powers of the Geneva Convention its labours will not have been in vain.

THE ROYAL MILITARY TOURNAMENT.

The Royal Military Tournament, which will close on Thursday, June 8th, has now entered upon its second week, when the competitions of the auxiliary forces give place to those of the regulars. These competitions are always looked forward to with the greatest interest by the public and consequently "crowded houses" every night are likely to be the rule. For many reasons, some of which we enumerated last week, it is almost a duty of each member of our vast empire who has the opportunity to endeavour to see this annual display of mimic warfare and military prowess which is worthy of a much better arena than it is at present able to command at the Agricultural Hall, Islington.

A SMART PIECE OF WORK.

A detachment of the 1st Lancers, Hyderabad Contingent, recently made a forced march against a large party of dacoits in the district of Bid in the Deccan. 100 sowars of the 1st Lancers, under Captain Humphrey, according to the *Pioneer Mail*, covered a distance of 57 miles in 24 hours, the transport taking 30 hours. On their arrival they attacked and carried the position occupied by a strong force of dacoits, killing and wounding 27 and taking 39 of the dacoits prisoners. The loss to the detachment of Lancers was small. This speaks well for the physique and marching powers of our Indian troops and for the efficient organisation of the transport arrangements.

THE PHILIPPINE CAMPAIGN.

There still seems to be a good deal of uncertainty as to the exact condition of affairs and the prospects of speedy peace in the Philippines. The American military authorities are for vigorously prosecuting the war during the rainy season in order to bring matters to a successful issue and are consequently prepared to encounter the risk of sickness and inefficiency from fever, dysentery, and other disorders

incidental to that season rather than incur the danger and cost of a long and protracted campaign.

THE OUTBREAK OF ENTERIC FEVER IN NATAL.

A correspondent of the *Daily Mail*, telegraphing from Cape Town, states that in the Natal section of the command there had been 95 cases of enteric fever with 11 deaths since October. Three officers, he says, were among those attacked with the malady but they recovered. According to the Army Medical Report for 1897 enteric fever would appear to be a prevalent and widely distributed disease among the troops in the South African command.

The Manchester Companies of the Volunteer Medical Staff Corps arrived at Netley on May 20th for their annual hospital training and bearer-company work. The strength was eight officers, 29 non-commissioned officers, and 148 men. They remained at Netley until May 27th. The following are the names of the medical officers who were with the Companies: Surgeon-Captain William Coates, Surgeon-Captain J. J. K. Fairclough, Surgeon-Captain J. B. Mann, Surgeon-Captain A. Phillips, Surgeon-Lieutenant W. B. Pritchard, and Surgeon-Lieutenant J. W. Smith.

Major Beatty, R.A.M.C., in charge of the Station Hospital, Hyderabad, Sind, has applied for leave to retire from the service.

Lieutenant-Colonel Deane, I.M.S., Residency Surgeon, Cashmere, is granted furlough for one year.

Correspondence.

"Audi alteram partem."

THE PLAGUE IN EGYPT.

To the Editors of THE LANCET.

SIRS,—If the plague is to be excluded from Egypt two things are necessary—first, the abrogation of the capitulations; and second, the amalgamation under one head of the two co-existing sanitary institutions or (what amounts to the same thing) the abolition of the Quarantine Board. A divided authority is always a source of inefficiency and more especially is this the case where prompt action is the chief factor of success. I do not know how the Quarantine Board is behaving now but formerly its proceedings were seldom entirely satisfactory. The task of controlling a large number of delegates of different nationalities, all holding more or less conflicting views, is beyond the power of man. Compromises and concessions must inevitably take place and half measures do not produce good results. It is true that the work of the Quarantine Board at the time I allude to was more than once fairly done under circumstances of some difficulty, but then the President knew his men and had tact, and, moreover, in the late Sir James Mackie the cause of common sense possessed a doughty champion whose place it must have been hard to fill.

That the capitulations are a terrible stumbling-block in the way of sanitarians no one who knows Egypt will deny. "Violation of domicile" is the cry of every foreigner who fears for his pocket, is jealous of British predominance, or it may be is ashamed of the filthiness of his penetralia. An English medical man in Cairo once drew attention to a case of small-pox in a laundry which was in full operation, but the sanitary authorities could do nothing (save by circumlocution) because the owner of the premises was a Greek. It is reported in the papers that some of the plague patients are of that nationality—I need not point the obvious moral. It has been suggested by one of your contemporaries that a number of medical men should be sent out from this country forthwith, but I do not think that strangers unacquainted with the language and customs of the Egyptians would be of much use. The case has been very clearly stated by the present head of the sanitary administration. Writing in 1892 with reference to cholera Sir John Rogers said, "It is not by spasmodic efforts when the disease is at the gates that it can be kept out of the country. It is only by improving the general sanitation of the country that anything can really be done; for this expenditure is necessary and the sanitary department has no funds at its disposal. A reserve fund of £2500 is all it has to fall back on. The success of sanitation in Egypt in the future is a question of money. With money much can be done, without it the present deplorable condition—a disgrace to any civilised country—must continue." Instead of two things being necessary to keep out the plague I should have said three—the third being of course money. It is impossible to eat one's cake and have it. The Soudan has been reconquered, but sanitation in Egypt has made no real progress. Not a single town has been sewered and such a thing as a pure water-supply does not exist outside the capital. The deplorable condition which would be a disgrace to any country, civilised or uncivilised, still prevails.

I am, Sirs, yours faithfully,

May 29th, 1899. H. R. GREENE.

"A CRITICISM ON THE DECISION IN HUNTER *v.* CLARE."

To the Editors of THE LANCET.

SIRS,—I have read with great interest Mr. James Wilson's comments on Hunter *v.* Clare. It is satisfactory to find that legal authorities are beginning to recognise the position of the medical profession before the law, and to admit that medical legislation has been perverted from its original purpose. For years I have insisted that the object of the Act of 1858 was to protect the public, and not to restrict the assumption of particular titles to particular sections of registered practitioners; and more especially I have contended that Section 40 was solely—to quote Mr. Wilson's words—"to make registration effective for its purpose by imposing a penalty on all such persons as falsely and wilfully hold themselves out to the public as registered under the Act, or who assume such titles or descriptions as would imply that they were so registered." Mr. Wilson endeavours to extenuate and to find excuse for the mis leading judicial decisions in the past. He says: "In these cases the judges based their decisions on the ground that such persons deceived the public, and thus frustrated the policy of the Act." To my mind the decisions were simply erroneous, and from a medical point of view illogical and inconsistent, and at times even ludicrous. If to protect the policy of the Act all who deceived the public might be swept into the meshes of Section 40, every quack and impostor would be readily disposed of. Unfortunately, there is little agreement on the Bench as to what constitutes "deceiving the public," so as to be amenable to Section 40, and sometimes, as in the late Hunter case, the Bench have judicially decided that a registered practitioner was deceiving the public when as a matter of a fact he was deceiving nobody.

Only three registered practitioners, I believe, have ever been prosecuted under Section 40. The cases were Ellis *v.* Kelly, Reg. *v.* Baker, and Hunter *v.* Clare. In the first the prosecution failed, but a foundation for future error was laid by the dictum of Baron Bramwell "that if any person wilfully and falsely called himself 'M.D.' he would be liable to a penalty though he was really a Member of the College of Surgeons, or of the Apothecaries' Society, and was so registered." His lordship appeared to censure this prosecution, for he said: "It was rather a strong step to take, for no one can doubt that the respondent had a foreign diploma of some kind and had on the strength of it called himself for a number of years 'Dr. Kelly.'" Baron Bramwell's remarks, however, would seem to show that he considered it would be an infraction of Section 40, if a registered practitioner assumed a degree to which he had no right. But it was a mischievous precedent, and although in the next case, Reg. *v.* Baker, there was little sympathy for the victim, who certainly had been guilty of considerable fraud on the public, the contention of Mr. Harris, Q.C., his counsel, that he had committed no offence under Section 40, was, in my opinion, unanswerable, that section never having been intended to meet frauds of this description. Mr. Wilson comments on the words of the then Lord Chief Justice, and says: "This language in the altered circumstances of registration under the 1886 Act would be wholly inapplicable to Mr. Hunter's case." That Act was law at the time when this "language" was used and in most respects was just as inapplicable to Reg. *v.* Baker, as to Hunter *v.* Clare. Mr. Wilson would seem to imply that the former case was before the passing of the Act of 1886, but it was in reality several years later. Anyone, however, reading Lord Coleridge's dicta on that occasion would

scarcely credit that his lordship was cognisant of the Act. Reg. *v.* Baker was the precedent on which the Caxton magistrates convicted Dr. Hunter; and so the evil grows, and it is alarming even to contemplate what might be the latest development of Hunter *v.* Clare, unless some steps be taken, as Mr. Wilson suggests, either to review that decision or to render such a course unnecessary by further legislation.—I am, Sirs, yours faithfully,

MAJOR GREENWOOD, M.D. Brux., LL.B. Lond.,
Barrister-at-law.

Hackney-road, N.E., May 29th, 1899.

THE ST. JOHN AMBULANCE ASSOCIATION AND ITS MEDICAL STAFF.

To the Editors of THE LANCET.

SIRS,—The enclosed correspondence, arising from a misunderstanding in a class which I examined, is, I think, of some interest to the profession. The cause of, or responsibility for, the mistake is quite irrelevant to the point at issue, although I may say, in passing, that a request in other terms for an explanation would have produced a sufficient one.

Now that the Central Executive Committee of the St. John Ambulance Association have unanimously resolved that the expression "why you neglected your instructions—*under your eyes*" (the italics are mine) is not "offensive in tone" or "lacking in a reasonable amount of courtesy"—it is only fair that members of the medical profession should know what is the standard of courtesy at St. John's Gate and the kind of estimation in which the profession is held by the authorities there.

I am, Sirs, your obedient servant,

May 29th, 1899. VALENTINE MATTHEWS.

[COPY.]

St. John's Gate, Clerkenwell, London, E.C., April 18th, 1899.

DEAR SIR,—I have received your report on the —— Institute with reply to my inquiry. In regard to the fact that —— and —— held both First Aid and nursing certificates, please explain why you neglected your instructions printed on page 3 in red ink under your eyes and omitted to re-examine these two candidates in *both* subjects. The consequence is that they will have to be examined again. A great deal of irritation has been caused at the —— Institution, to say nothing of the annoyance and trouble given to myself.

Yours faithfully,

Dr. Valentine Matthews. (Signed) HERBERT C. PERROTT.

[COPY.]

To the Right Hon. Viscount Knutsford, G.C.M.G., Director of the Ambulance Department and Chairman of Committee, St. John Ambulance Association.

April 20th, 1899.

SIR,—I have received from Sir Herbert C. Perrott, chief secretary of the St. John Ambulance Association, a letter of which I enclose a copy referring to a mistake which occurred at a recent examination. The tone of the letter is, I consider, most offensive, and even if the mistake were entirely due to my fault—which I do not for one moment admit—I think I have a right to expect a reasonable amount of courtesy in communications from the chief secretary. If this were a private communication from Sir Herbert Perrott I should not hesitate about the method of dealing with it, but as it is an official letter from the chief secretary of the St. John Ambulance Association to one of its examiners a wider question is opened and I think it right to bring the letter to the notice of the committee of the association. I am not unaccustomed to discourtesy at the hands of the executive of the association, but I cannot think that it is the wish of the committee that a member of the medical profession who has done much gratuitous work for the association should be subjected to receiving a letter in such terms as the one which I complain of. I am, Sir, your obedient servant,

VALENTINE MATTHEWS.

[COPY.]

St. John's Gate, Clerkenwell, London, April 20th, 1899.

DEAR SIR,—With further reference to the examination conducted by you at the —— Institute on the 28th ult. Mr. —— is very much upset because I am unable, in consequence of your omission, to allow the final re-examination of —— and ——. The best way out of the difficulty appears to be that you should make an appointment with Mr. —— of the —— Institute to re-examine these two ladies in First Aid either at the —— or at your house. Mr. —— would require about a week or 10 days' notice of the time that would suit your convenience and would of course expect you to conduct this re-examination without charge.

Yours faithfully,

(Signed) HERBERT C. PERROTT,
Chief Secretary, St. John Ambulance Association.

Dr. Valentine Matthews.

[COPY.]

To the Right Hon. Viscount Knutsford, G.C.M.G., Director of the Ambulance Dept., and Chairman of Committee, St. John Ambulance Association.

April 20th, 1899, 10 P.M.

SIR,—Since closing my letter to you of earlier to-day I have received a letter from the chief secretary of to-day's date suggesting a method by which the mistake in question may be rectified. I may say that I am quite prepared to assist in any reasonable way to put right the difficulty and also, as the question of charge is mentioned by him, that as the greater part of my work for the association has been gratuitous, the question of fee is not a consideration with me. I venture to ask the committee, as it is impossible for me, for the present at least, to reply to any letters from the chief secretary, to so far favour me as to send any communications they may desire to make through a different channel. I am, Sir, your obedient servant,

VALENTINE MATTHEWS.

From the Right Hon. Viscount Knutsford, Chairman of Committee, &c., St. John A. A., to Mr. Valentine Matthews.

[COPY.]

April 23rd, 1899.

SIR,—The two letters from Sir Herbert Perrott to yourself and your two letters to me have received my careful consideration. I need hardly say that Sir Herbert Perrott disclaims any intention of being discourteous to you and I must frankly add that I do not consider that either his letter of April 18th, which is the one most complained of, or his letter of the 20th are "offensive in tone" or lacking in "a reasonable amount of courtesy," though I regret that you should have felt hurt by them.

In the first letter Sir H. Perrott calls, as he was bound to call, for an explanation why the instructions—most clear in themselves and printed in red ink so as to ensure observation—were not acted upon. You must remember that considerable annoyance has been felt by the —— Institution that owing to the non-observance of the instructions a re-examination has to take place, and it was only due to them as well as to ourselves to ask for an explanation. Sir Herbert Perrott refers to the annoyance and trouble given to himself and I am bound to say this reference is not unjustifiable, as you would yourself admit if you saw even a part of the correspondence that is caused by examiners not following the instructions. As to the second letter, Sir Herbert Perrott necessarily referred to the question of "charge," as he is stating what Mr. —— of the —— Institute would expect. He does not assume that you would make a charge for this "re-examination" nor is there any question raised by this as to your readiness to promote gratuitously ambulance work. I trust that after this explanation from myself as head of the department you will not think it desirable to press your request that the correspondence should be laid before the committee, but I am ready to do so should you still wish it.

I have only to add that all official letters of the association must be sent through the chief secretary.

I remain, Sir, your obedient servant,

(Signed) KNUTSFORD.

[COPY.]

To the Right Hon. Viscount Knutsford, G.C.M.G., Director, &c., St. John Ambulance Association.

April 24th, 1899.

SIR,—I am much obliged for your letter of yesterday's date, but regret that I cannot adopt the view that there is nothing offensive in the chief secretary's letter of the 18th which is the one I complain of. As the matter is one which affects the relationship of the chief secretary to the medical staff, and indirectly the attitude of the association towards the medical profession generally, I shall feel obliged if the correspondence is laid before the committee. The question of responsibility for the mistake does not affect the point which I have raised. I quite appreciate the fact that a mistake is likely to cause "irritation,..... annoyance, and trouble," but at the same time, as shown in the present case, the tone of a letter such as the one I complain of tends to intensify rather than diminish these feelings. I am unwilling, whosever the mistake, that the candidates should suffer and have written to Mr. —— with the view of arranging a convenient place and time for their further examination.

I am, Sir, your obedient servant,

VALENTINE MATTHEWS.

[COPY.]

St. John's Gate, Clerkenwell, London, E.C., May 19th, 1899.

SIR,—I am requested by the chief secretary to inform you that at a meeting of the Central Executive Committee held here yesterday the following correspondence was read and considered: two letters from you to the director and chairman dated April 20th; one letter from you to the director and chairman dated April 24th; copies of letters from the chief secretary to you dated April 18th and 20th. Copy of a letter from the director and chairman to you dated April 23rd.

It was proposed, seconded, and unanimously resolved that the committee sees no reason to depart from the opinion already expressed by Viscount Knutsford, the director and chairman, in his lordship's letter dated April 23rd. I am, Sir, your obedient servant,

(Signed) WM. R. EDWARDS, Accountant and Storekeeper.

Valentine Matthews, Esq., M.R.C.S.

"FEES TO MEDICAL WITNESSES AT ASSIZES AND SESSIONS."

To the Editors of THE LANCET.

SIRS,—For some years past efforts have been made by the council of the United Kingdom Police Surgeons' Association to secure better fees for those who have to attend as medical witnesses in the police, the sessions, and the assize courts. We find that in the police or magistrates' court the practice varies. In all cases committed for trial the medical witness is paid the inadequate fee of half-a-guinea each day (before the magistrate) after the case has been tried at the sessions or assizes. When the case is summarily disposed of by the magistrate the medical witness is paid half-a-guinea (each case, not each day) in some places. In Leeds and Leicester the

police surgeons receive no fee whatever in such cases and we have good reasons for believing that the list of places where this demand for gratuitous medical evidence prevails might be considerably augmented. Will you kindly allow us through your columns to ask any of your readers (whether police surgeon or not) who is not paid by the magistrate in non-committal cases to send his name to one of us?

We are, Sirs, yours faithfully,

FRED. W. LOWNDES (40, Knight-street, Liverpool),
H. CULLIFORD HOPKINS (6, Bladud-buildings, Bath),
Honorary Secretaries, United Kingdom Police Surgeons' Association.

May 27th.

"THE PATHOLOGY OF THE PERICARDIUM."

To the Editors of THE LANCET.

SIRS,—I am much indebted to Mr. Harold L. Barnard for his courteous reply in THE LANCET of May 20th to my letter published in THE LANCET of April 29th. I trust he will not think me ungracious when I say that his letter leaves me in much the same position as before. I do not, of course, for a moment deny that the respiratory movements may under certain circumstances aid the circulation. On the contrary, I am sure they do; and it is imperative that we should understand what those circumstances are and what kinds of breathing are most favourable for the transit of blood from the cavæ to the aorta. What I contend is that the mere expansion and contraction of the lungs have very little, if any, accelerating effect on the blood-flow in ordinary quiet breathing and that thoracic aspiration is to a large extent independent of thoracic movement. Mr. Barnard writes as though it were much greater during inspiration than expiration. Thus, he says: "During deep respiration in man the negative pressure of the thorax varies from −1 to 2 mm. Hg in expiration to −30 mm. Hg during inspiration." Now, in a respiration of this kind there is a continuous increase of suction during inspiration from −1 to −30 mm. Hg followed by a *continuous decrease* during expiration from −30 to −1 mm. Hg. That is to say, very shortly after expiration commences suction may still be high and if we strike the mean suction for expiration it may not be much less than that for expiration. It is, however, less for the reason given in my last letter.

I have assumed Mr. Barnard's figures to be correct, although as a matter of fact the intra-thoracic pressure at the end of a complete expiration is decidedly positive, especially when the thorax is highly elastic—a fact of some importance in reference to Mr. Barnard's statement regarding the breathing of runners. He writes: "I can positively state that in a well-trained cross-country runner whose heart and respiratory pump are efficient for the exercise he undertakes inspirations are profound and expirations are complete. The air exchange at each respiration is maximal." Now, Sirs, while not denying the implication that expirations may be more complete in well-trained runners than in those who are not well trained I confess that I shall be greatly surprised if observation confirms Mr. Barnard's statement that the well-trained cross-country runner expires completely when running. In long-distance running expirations are possibly more complete than in sprinting, but it would be very difficult to expire completely during any kind of running, for, as just observed, a complete expiration involves a positive intra-thoracic pressure, and apart altogether from the vascular obstruction which it induces in the lungs themselves such an expiration leads to pressure upon the auricles and large intra-thoracic veins—a condition of things which could not be tolerated at a time when it is urgently necessary to facilitate the circulation to and from the right heart.

Mr. Barnard's observation that in the well-trained runner the abdominal wall contracts and hardens with each inspiration is interesting, though I should not have expected it to occur except under rare circumstances. Mr. Barnard does not specify the particular abdominal muscles which contract. He cannot, I presume, be referring to those abdominal muscles which depress the thorax—e.g., the recti and obliqui externi—since a complete inspiration would be prevented by their contraction. (Nor does the diaphragm—one of the muscles constituting his "abdominal sphere"—descend to any great extent in a complete inspiration in the normal young adult man. A complete inspiration tends, indeed, to induce a negative intra-abdominal pressure.) Therefore such inspiratory abdominal contraction as does occur in running must, presumably, involve the transversely-disposed muscles, especially the transversales which are *par excellence* the retractors of the abdomen, bringing as they do the anterior and posterior walls of the abdomen into firm contact.[1] The presence of respiratory waves on the pulse-tracing cannot, as Mr. Barnard contends, be accepted as proof that the respiratory movements aid the circulation. All they show is that the movements in question affect the circulation in some way or other; it is quite easy to produce waves in an elastic tube containing a flowing fluid without accelerating the flow.

I am still somewhat doubtful whether in ordinary quiet breathing the descent of the diaphragm appreciably quickens the flow of portal blood through the liver. It is tempting to suppose that some such aid is needed, seeing that there is only a moderate pressure of blood in the portal vein to drive the blood through a complex system of vessels containing about one-fourth of the entire blood-mass. Two facts, however, should be remembered in this connexion: (1) a complex vascular system need not oppose great resistance, the non-recognition of which fact has led physiologists into many errors regarding the circulation; and (2) in birds there is no diaphragm and therefore in them the circulation through the liver needs no help from the diaphragm. I trust that it may not be thought from these somewhat sceptical observations that I under-estimate the valuable work which Mr. Barnard has done on the circulation; it has been most helpful to me.—I am, Sirs, yours faithfully,

Wimpole-street, May 30th, 1899. HARRY CAMPBELL.

A BLIND LEADER.

To the Editors of THE LANCET.

SIRS,—I enclose one of the notices posted in various parts of this town by a local (Greek) practitioner. It is interesting as expressing the opinions given vent to by other local physicians as well as his own. I may say that we are having a well-marked epidemic of typhoid fever and the cases are well known to be more numerous by far than for some years past, probably owing to contamination of the water-supply which is usually very good. The following is a literal translation of the notice:—

"As some persons practising medicine in the town have spread a report that the disease found at present at Acca and supposed to be bilious or typhoid fever is caused by the water, and so the minds of people have been disturbed without legal cause and they have begun to drink boiled water, I come now with this notice, for the sake of humanity, declaring to the people that the cause of this disease is in the air, not in the water as is said, and it is not the disease supposed by these persons.

"*Precautions to be Taken.*

"Avoid cold, dampness, drinking iced water, fruit and food hard to digest; also avoid the boiling of water, which deprives it of its nutritive qualities and renders it harmful. It is best to filter it.

"May 3rd, 1899." (Signed) "GEORGI IOLAKIAS.

With regard to the native population I may state that a good many of them can see the folly of the above, but almost all without exception refuse to boil their drinking water. I am, Sirs, yours faithfully,

J. CROPPER, M.A., M.B., B.C. Cantab.

Acca, Palestine, May 19th, 1899.

"A CRITICISM OF THE MORE COMMONLY EMPLOYED TESTS FOR ALBUMIN IN URINE."

To the Editors of THE LANCET.

SIRS,—The carbolic acid test for albumin as first described by Dr. Colquhoun in his paper differed from all others with which I am acquainted in that he recommended a *saturated* solution of phenol in absolute alcohol. In his letter in THE LANCET of May 20th, however, he corrected this and substituted a solution which is only about half saturated. The test is now so like one described by Dr. C. Meymott Tidy in THE LANCET for May 14th, 1870, that I may be pardoned for drawing Dr. Colquhoun's attention to it. Tidy added equal parts of alcohol and carbolic acid separately to the urine, shaking after each addition, and although he mentioned that a ready prepared mixture might be used he maintained that the separate addition of the reagents gave better and more clinical results, one part of albumin in

[1] ...piratory Exercises, p. 58.

15,000 being shown. It may also be interesting to note that Dr. W. G. Smith pointed out in the following number of THE LANCET that in 1869 Méhu had published an account of a similar test.—I am, Sirs, yours faithfully,

P. J. CAMMIDGE.

St. Bartholomew's Hospital, E.C., May 27th, 1899.

*** This correspondence must now cease.—ED. L.

"FURTHER STATEMENT AS TO RESULTS OBTAINED BY OPERATION FOR CANCER OF THE BREAST."

To the Editors of THE LANCET.

SIRS,—I find that I must make a correction with regard to case No. 4 in my recent paper[1] on the "Further Statement as to Results obtained by Operation for Cancer of the Breast." The medical man under whose care the patient was has retired and I wrote to his successor in January to ascertain how the patient was. He replied that he had not seen her for some time but would make inquiries, and subsequently he wrote that as far as he could ascertain she was in her usual state of health. It seems, however, that she had changed her medical attendant and quite recently I had a note from the gentleman under whose care she now is in consequence of which I went to see her on May 17th. I then learned that for about a year she has had a troublesome cough which has lately become worse and which may very possibly be due to enlarged bronchial glands. About the same time a little hardness developed on the scalp with slight ulceration which has gone on increasing very slowly since and which I may shortly say presents all the clinical characters of a rodent ulcer. Within the last few weeks she has got much thinner and weaker and several small nodules (nine in all) have developed in the skin and subcutaneous tissue, especially in the abdomen, and those in the skin resemble in every respect small scirrhous nodules as one often sees them in the skin over the breast. With the exception of one small and quite recent nodule the whole area of the operation seems absolutely free from disease. I think we must assume that in this case some disease has remained latent all these years (about eight years) and for some reason has suddenly sprung into activity again, and as if this is the case we have to do with a very late recurrence I have thought it right to correct my previous figures without delay. I see no evidence which would justify the conclusion that there is here a fresh development of malignant disease (unless in the case of the scalp) and even in the absence of a microscopical examination I cannot doubt that the patient is suffering from malignant disease of the same character as that previously present in the breast.

I am, Sirs, yours faithfully,

May 29th, 1899. W. WATSON CHEYNE.

THE INTERNATIONAL CONGRESS ON TUBERCULOSIS AT BERLIN.

(FROM OUR BERLIN CORRESPONDENT.)

THE International Congress on Tuberculosis was opened with much ceremony on May 24th in the palace of the German Reichstag in presence of the German Empress. Representatives attended on behalf of the German and other Governments, medical societies, learned bodies, &c., and a great number of members had come from all parts of Germany and abroad. The chair was taken by the honorary president, the Duke of Ratibor, who in his inaugural address pointed out that not only the medical profession but all classes of society must unite in the campaign against tuberculosis and that the Congress was not a purely scientific one but a great international work. He thanked the foreign delegates for attending this meeting of German physicians and philanthropists and he was sure that their opinion and advice would be listened to with great attention. The Minister of the Interior, Count Posadowsky, President of the National Association for Providing Sanatoria, then delivered an address, saying that the great development of the factory system had been favourable to the increase of tuberculosis and that it was the duty of the well-to-do classes to concert measures against this most widespread of all diseases. Alluding to the conference at the Hague he said that it was a good omen that two congresses were meeting at the same time—the one to mitigate the horrors of war, the other to repress the disease which was the most terrible enemy of humanity. Addresses of welcome delivered by the Mayor of Berlin and the Rector of the University, Professor Waldeyer, were followed by speeches made by the foreign delegates. The representative of America, Dr. von Schweinitz, spoke first, then Professor Brouardel on behalf of the Academy and Faculty of Medicine of Paris, and Sir Thomas Grainger Stewart in the name of the British delegates. Professor Maragliano of Genoa was the representative of Italy, Dr. von Kury and Professor Koranyi of Austria and Hungary, and Dr. Bertenson of Russia. The inaugural proceedings were closed by the vice-president, Professor von Leyden, who pointed out that phthisis was no longer reckoned an incurable malady and that the medical profession was glad to join with all classes of society in controlling it.

The Spread of Tuberculosis.

Dr. KOHLER, director of the Imperial Health Office, read the first paper. Taking as his subject the Spread of Tuberculosis, he said that notwithstanding the incompleteness of the statistics the increase of tuberculosis throughout the world was unquestionable. Tuberculosis occurred in every country. Of the European States Great Britain, Belgium, and Italy were the least affected, whilst Hungary, Austria, and Russia were the most heavily visited by the disease. In Germany the average mortality was 2·25 per 1000 of the population. The influence of altitude and of meteorological conditions was not yet precisely ascertained. The male sex was more liable than the female. The greatest number of deaths occurred between 20 and 30 years of age. From 1894 to 1897 87,600 persons died annually from tuberculosis in the age-period from 15 to 60 years. It was thus the duty of society to combat tuberculosis as energetically as possible and that not only by destroying the bacillus but also by strengthening the resisting power of the human organism.

The Relations between Social Conditions and the Spread of Tuberculosis.

Dr. KRIEGER (Strassburg) said that social conditions had an undeniable influence on the spread of the disease. It had not yet been ascertained statistically what effect food and house accommodation exercised, but it was an established fact that association with phthisical subjects in small dwellings facilitated infection. The cleansing of living-rooms and the destruction of sputa containing bacilli were therefore of the greatest importance. Different occupations predisposed to tuberculosis in varying degrees; nurses and persons who worked in close rooms, such as tailors and printers, were very liable to it.—Dr. GEBHARD (Lübeck) then spoke on tuberculosis from the standpoint of the workmen's insurance laws.

Tuberculosis in the German Army.

Surgeon-General SCHJERNING pointed out that the Medical Department of the German army had laid great stress on measures to prevent the spread of tuberculosis in the army. To this end the soldiers were better fed than before, they were better clothed, and among other hygienic measures the barracks were improved from a sanitary point of view. Special sanatoria for phthisical soldiers had been opened in order to isolate the patients as soon as possible. The result, he said, was that since 1882 the mortality from tuberculosis had decreased. In places where phthisis was rife among the civil population the garrisons used to be infected to a high degree, the disease being obviously conveyed from the civil population to the military, especially to those employed on indoor duty as clerks and to the bandsmen, among whom a great mortality prevailed. The majority of military patients were found among men in the first year of their service and it might be inferred from this fact that some of them were already infected before entering the army, proving that recruits ought to be examined with great care before being enlisted.

Tuberculosis conveyed by Meat and Milk.

Professor BOLLINGER (Munich) said that in view of the increase of tuberculosis among cattle the consumption of raw meat ought to be avoided. He referred also to the use of

[1] THE LANCET, March 18th, 1899, p. 756.

milk from tuberculous cows as very dangerous, especially to children. Infantile tuberculosis he considered to be mostly conveyed to the children by unsterilised milk. Microscopical examination of meat ought to be made compulsory by law.

Tuberculosis and the Printing Trade.

Dr. GEORGE MEYER, medical officer to the printers' sick-club in Berlin, drew the attention of the Congress to the fact that the mortality from tuberculosis among the Berlin printers had not decreased during recent years. More than 40 per cent. of printers who had died were phthisical, and in women working in printing offices the mortality was still higher.

The Relations between Koch's Bacillus and Tuberculosis.

Professor FLÜGGE said that it was now an established fact that Koch's bacillus was the cause of different forms of tuberculosis in human beings, of pulmonary, laryngeal, glandular and miliary tuberculosis, and of lupus. In necrotic tuberculous tissue the bacillus perished as had been stated by Professor Koch himself. It had been said by some authorities that there existed other bacilli which like Koch's bacilli were not destroyed by acids—for instance, the bacillus of lepra and the bacillus in smegma, but after careful examination it had been acknowledged that the biological qualities of these bacilli were quite different from those of Koch's bacilli. By artificial cultures the relations of these different bacilli had been ascertained. The endeavour to refute the doctrine of the specificity of Koch's bacillus had, therefore, Professor Flügge considered, been unsuccessful.

The Dissemination of Koch's Bacillus.

Professor FRÄNKEL (Halle) said that not every phthisical patient was a danger to other people. The bacilli were found in the sputa and they knew by the researches of Dr. Cornet that tuberculosis was spread nearly exclusively by dried sputum. The mode of infection had been ascertained by experiments upon animals; injections of tuberculous cultures produced local tuberculosis and it was known that children playing on a floor soiled by tubercle bacilli were liable to suffer from tuberculosis of the glands, the bacilli entering through the mucosa of the mouth. Tuberculosis of the lungs was produced by inhalation of tubercle bacilli coming either from dried sputa, as stated by Dr. Cornet, or from minute air-borne particles of water containing bacilli, according to Professor Flügge's opinion. Both modes of infection might be present together. Professor Fränkel finally said that a healthy organism was able to destroy the bacillus and that people living in dirty or badly ventilated dwellings were more susceptible than others.

Heredity, Immunity, and Predisposition.

Professor LÖFFLER (Greifswald) said that heredity had been for a long time believed to be the cause of phthisis. Hereditary tuberculosis, however, was present only when the mother had suffered from tuberculosis of the reproductive organs. A weak constitution might be hereditary and the so-called habitus phthisicus undoubtedly existed. But to this disposition an infection by the tuberculous virus must be added to produce real tuberculosis. It further depended upon the virulence of the bacilli whether tuberculosis might break out or not after the occurrence of infection. He mentioned a case where an entire family had been infected by one phthisical member. A perfunctory examination might have led to the conclusion that these cases were due to heredity. An immunity against tuberculosis did not exist.

Tuberculosis in Children.

Professor HEUBNER insisted upon the prevention of contagion by parents. Tuberculous parents ought to be advised not to kiss their children and, if possible, to send them to colleges, &c., where they might live separated from their families. The orphan asylums, schools, &c., where children met together ought to be carefully observed. Special sanatoria for children ought to be erected in connexion with those for adults.

The Marriage of Tuberculous Persons.

Dr. KIRCHNER stated that he has shown by statistical research that when one consort suffers from tuberculosis the other is liable to be infected. It is, of course, impossible to prevent phthisical people from marrying, but they should be advised not to marry until two years after the acute symptoms have disappeared. Both contracting parties ought to be informed of the danger which they may possibly incur and of the preventive measures by which contagion may be avoided. Dr. Kirchner concluded by saying that under these circumstances such a marriage is relatively safe for the healthy partner whilst it may even contribute to the welfare of the affected one.

Food and Tuberculosis.

Professor VIRCHOW was of opinion that meat being relatively free from tuberculosis the existing laws were sufficient for the control of public slaughter-houses. Imported meat and private slaughtering ought, however, to be carefully controlled. Living animals ought to undergo the tuberculin test. The greatest danger arose from the milk of tuberculous cows. The most radical measure would be to kill them; but as this procedure is up to the present not available the sale of the raw milk of cows which have reacted to the tuberculin test ought to be prohibited or allowed only after sufficient sterilisation. The tuberculosis of pigs has been somewhat neglected and the slaughtering of these animals ought therefore to be controlled in a more efficacious way.

Entertainments.

The members were received on the first evening by the municipal authorities in the town-hall and on the second day by the Imperial Chancellor, Prince Hohenlohe, at a garden party. A gala performance took place at the Royal Opera and the leading physicians of Berlin entertained the distinguished members of the Congress at dinner and other entertainments. The medical journals issued special Congress numbers which were presented to every member.

(To be continued.)

NOTES FROM INDIA.

(FROM OUR SPECIAL CORRESPONDENT.)

Corps Distinctions for the Medical Services.—The Administrative Difficulties of the Sanitary Department in India.—Jigger or the Bechoo of Brazil.—Returns of the Plague Epidemic.

IT is notified in general orders that members of the Indian Medical Service are to wear the letters I.M.S. on their shoulder-straps and the members of the Indian Subordinate Medical Department the letters S.M.D. Members of the Royal Army Medical Corps in India will wear the letters R.A.M.C.

The sanitary and administrative reform questions have been forcibly advocated by the late Sanitary Commissioner of Bombay in a recent number of the *Asiatic Quarterly Review*. He there cites a strong plea for letting medical men alone in matters medical and has shown how civilians and even subalterns have superseded medical men during the plague epidemic. He writes with honest warmth: "A Bombay civilian without any apparent qualification as a sanitarian was appointed to superintend plague operations with a salary and allowances according to grade and service equal to the pay of from eight to 13 medical officers. It may be permitted to doubt if the services of a single civilian, however eminent, are worth more than a dozen medical men. Rs. 3800 plus Rs. 200 a month travelling allowance would command the services of two or more of the most celebrated sanitarians in Europe whose observations and reports would be inestimable to the public and posterity. What can be the scientific importance of the reports of Bombay Commissioners or of assistant collectors?" The article also refers to the fact that one of the civilian members of the Plague Commission officiated for a time as Plague Commissioner in the Presidency of Bombay and that consequently he will have to sit in judgment partly on his own proceedings. Another complaint of a still more serious character the writer brings forward with just force. It appears that the annual report of the Sanitary Commissioner, which is naturally a highly technical one, is criticised and reviewed by a young layman who happens to be an under secretary to Government and who is empowered to expunge any portion of it should it be disapproved by any other department. The writer adds that it has occurred within his own experience and also within that of his predecessor. The Indian Administration is so generally held up as a model and the English public have hitherto

reposed such confidence in it that when these and other blots are pointed out they are immediately doubted and ignored. A few months' official experience in India would very quickly open the eyes of the Secretary of State on this and many other matters. In other departments similar complaints can be raised.

With reference to some of the plague operations Dr. MacRury writes: "The inconsistency of imposing land quarantine, an objectionable and impracticable measure of protection against disease, has been a matter of surprise to all modern sanitarians because it has been for many years persistently denounced as an absurdity by the Home and Indian Governments through their chosen delegates at European sanitary conferences."

The jigger which has been imported into Bombay from East Africa seems to be identical with the bechoo of Brazil. The latter is described as a small insect of about a quarter or a third the size of an ordinary flea and to all appearances the same in shape. In its ordinary state it appears to live on the surface of the ground. On walking across ground infected with these fleas the feet and legs are apt to become covered with them. They seem to select tender points of skin, especially around and under the toe-nails or more particularly a small abrasion or sore caused by friction from a boot. If unobserved they penetrate the skin and commence to burrow. In about 24 hours they will be out of sight. A slight irritation then guides the sufferer to the spot where they are likely to be found and they have then to be treated much as a thorn, taking care to extract the whole insect. If any part is allowed to remain the irritation continues. If not removed at this period or if they escape detection they burrow completely out of sight and localisation and remain apparently quiescent for about a week. During this period the irritation subsides, but at the termination inflammation sets in. A small round sort of sac full of eggs is then discovered of about the size of an average pea which by careful pricking of the skin can be extracted entire. After the extraction of this sac a small round hole is left in the flesh which must be carefully watched. From some sores many sacs of this description are at times extracted. The wound is also particularly liable to become reinfected.

There is little to record this week with regard to the plague. For the whole of India 1321 deaths were recorded for last week, of which Bombay Presidency (and Sind) furnished 1137, Madras Presidency 16, Mysore State 53, Hyderabad State four, Central Provinces three, the Punjab 18, and Bengal 102 (Calcutta 83, Howrah 18, and Saran one). A slight increase in total mortality as well as in plague mortality is recorded both for Bombay city and Karachi.

May 10th.

BIRMINGHAM.

(FROM OUR OWN CORRESPONDENT.)

Medical Benevolent Society.

THE seventy-seventh annual meeting of this society was held on May 26th. The report showed that the society was in a satisfactory condition. The invested funds amounted to upwards of £14,000. 17 annuitants were on the books, the annual value of the grants ranging from £20 to £40, and a donation of £3 was given to each at Christmas. The number of benefit members in the society was 373 at the beginning of the year; 21 had been admitted, seven had died, and five had left, the total at the end of the year being 382. New rules had been drawn up on a model supplied by the Registrar of Friendly Societies which had been approved. Various votes of thanks were passed and the members, as usual, dined together after the meeting.

The Consultative Movement.

The proposals of the Hospital Saturday Fund Committee as to the appointment of a consultative department continue to disturb the minds of the profession. A meeting was held on May 18th at the Medical Institute, when a subcommittee of three was appointed to confer with the promoters of the scheme and to report later. Opinions differ as to the wisdom of offering opposition to the movement, while some appear to think that united action, if it can be obtained, will modify or alter the suggestions already made as to the working details.

Unhealthy Streets.

The annual report of the medical officer of health, Dr. Hill, contains an interesting account of the relative mortality in different quarters of the town. The death-rate for the entire city was 19·5 per 1000. In St. Bartholomew's Ward it was 25·2, in St. Stephen's 22·6, and in St. Mary's 21·9 at the end of 1897. The Health Committee arranged for an enumeration of the population, number of houses, and certain sanitary conditions in every street in the town. A table is given showing the death-rates in the whole of the streets in St. Bartholomew's ward, together with the percentage of houses with front ventilation only and the percentage of houses let at a very low rent. Thus not only the streets but the class of houses are given where the high mortality is observed. In some streets the death-rate ranges from 33 to 42 per 1000. In streets where the houses are back to back with front ventilation only the rate is much higher than where there is a freer current of air. The connexion between low-rented houses and high death-rates is even more striking. The figures given show unmistakeably that where sanitary measures have prevailed good results have followed, and valuable lessons are to be learned from the observance of known laws and conditions.

Death of Mr. G. F. Crooke, M.D. Edin.

On May 30th Dr. Crooke, after hurrying to catch a train, expired in the railway carriage. At one time Dr. Crooke was pathologist to the General Hospital. An able microscopist and an expert bacteriologist, having been a pupil of Dr. Koch in Berlin, Dr. Crooke undertook a general practice outside the town some years ago, preferring to work among the poor rather than in public appointments. His death occasions much regret.

May 30th.

MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

Overcrowding of the Workhouse at Stockport.

THE overcrowding at the Stockport Workhouse is no new thing and the guardians discussed it again at great length on May 18th. The insufficient accommodation in the workhouse for children suffering from infectious diseases was attended, it is alleged, in a recent outbreak with disastrous consequences. But though it has been discussed nothing seems to have been done and the state of things remains a scandal. During the week previous to their meeting on May 18th a deputation of the guardians attempted without success to obtain the sanction of the Local Government Board to the purchase of six cottages adjacent to the workhouse at a cost of £900. The Board suggested as an alternatives either a temporary structure on land at Stepping-hill, bought about two years ago as the site for a new workhouse, or the utilising of cottages already on that site. Both suggestions were strongly opposed by a section of the guardians who object to a new workhouse being built and wish to extend the present one, a scheme which the Local Government Board refuses to sanction. They think that the removal of any of the inmates would be sure to lead up to the building of a new workhouse. In the meantime these inmates suffer from what it is in the power of the guardians to remedy, but presumably they consider themselves not the guardians of the poor but of the rates, which they try to protect by economy which is false and in the end extravagant. The Nurses' Home is also overcrowded, 27 persons occupying rooms which have only proper accommodation for 22. A proposal to ask the sanction of the Local Government Board to the purchase of cottages near the present workhouse was defeated and it was decided to obtain a report on the subject from the master of the workhouse. All this resembles nothing so much as the Chinese or Turkish methods of "how not to do it" and, as the facts are well known, only means delay unless the guardians consider that the evils of overcrowding can be remedied by a report.

Seats for Shopwomen.

The agitation in favour of providing seats for shopwomen has hitherto been carried on by ladies and benevolent medical men from motives of humanity with, unfortunately, but very partial success. It seems now, however, that the

shop assistants themselves are moving in the matter. Under the auspices of the Lancashire and Cheshire District Council and the National Union of Shop Assistants—a title surpassing in prolixity that of our branch of the British Medical Association—a conference took place on May 28th at Warrington at which delegates were present from 25 branches representing some 14,000 members. The President in his address referred to "Lord Salisbury's flippant attitude respecting the Seats for Shop Assistants (Scotch) Bill," and a strongly worded resolution condemnatory of his attitude was proposed by a lady delegate from Manchester, seconded by one from Southport, and carried with enthusiasm. The former said it was not only the present shop-girls who had to be thought of, but "the next generation of children by mothers drawn from behind the counter whose health had been ruined by long standing." The necessity for any agitation to get rid of so cruel a custom as the denial of seats for shop-girls when temporarily unoccupied bespeaks an almost criminal indifference to their welfare on the part of employers which bodes ill for the hope on which Lord Salisbury seemed to rely—that their humanity would redress this wrong.

Manchester Volunteer Medical Staff Corps.

The Manchester companies Volunteer Medical Staff Corps have had the advantage of a week's training at Netley where their work was interesting and varied. On May 24th and 25th the formation of collecting and dressing stations was practised. 30 men bearing labels telling of their supposed injuries were scattered through the hospital grounds and on the shore. Squads of stretcher-bearers were then sent out to "search for the wounded." When found first aid is given, dressings are applied, then the wounded are taken to the collecting station and from there in an ambulance wagon to the dressing-station, where the surgeons attend to injuries and perform any operations urgently needed. Thence they are taken in a second set of wagons to the field hospital. It is said that the soldier patients at the hospital were most willing to give their experience in ambulance work, whether from the Indian frontier, the Soudan, or Crete. On May 26th the companies were inspected by Surgeon-General Nash and the parade state at the inspection numbered 184 of all ranks out of 202, the enrolled strength. The camp broke up on Saturday and the men arrived at Manchester the same evening looking bronzed and fit and much improved by their week in camp.

Hospital Difficulties in the Nantwich Union.

Two typhoid fever patients were removed recently as pauper patients to the Crewe Isolation Hospital and Mr. Atkinson, the Poor-law medical officer of Crewe, was requested by an order from the clerk of the guardians to attend them. Mr. Atkinson wrote that he could not be expected to attend pauper patients who had been removed there from another medical officer's district and that he regarded them as private patients. The clerk replied that, the patients being paupers and the hospital being in the Crewe medical officer's district, he had no alternative but to make an order for the Crewe medical officer to attend them. Mr. Atkinson protested against this as meaning that any infectious persons from any of the 74 parishes might be drafted any day to the Fever Hospital at Crewe. The matter was discussed at the meeting of the guardians on May 27th and it was decided to pay Mr. Atkinson "reasonable remuneration" and the Finance Committee were asked to report "as to the steps to be taken in future cases." In the afternoon, at a meeting of the Rural District Council, there was a long discussion as to the liability of the council to pay an account of £15 for the maintenance of a patient in the Crewe Hospital. A farmer and milk-seller had a lad in his employ who had scarlet fever and had him removed, it was stated, in the interests of the milk and for the protection of his family, against the orders of Mr. Vaughan to the Crewe Isolation Hospital, where he was only admitted on the farmer signing an agreement to become responsible for the cost of his maintenance. When he received the account the farmer sent it to the Crewe medical officer who in his turn sent it to the rural council. It was pointed out to the council that if they acknowledged any liability or even as an act of grace paid some portion of the amount "the door would be open for similar applications from farmers whose servants might be attacked with an infectious disease." So the council decided against the "open-door policy" and by a large majority refused to pay anything. It would be rational policy, however, in the public interest to help and not to hinder the isolation of infectious cases.

The Study of Tropical Diseases.

In response to representations from the Colonial Office the Council of the Owens College has arranged for the delivery in the Medical School of a course of lectures on tropical diseases. They will be given by Dr. Graham Steell. The first lecture is to be given to-morrow and the course will be open to medical practitioners and students.

The Infirmary Site Question.

It was stated at a meeting of the Infirmary Board yesterday that to-morrow has been fixed for a meeting between the board and representatives of the corporation to consider the infirmary site question. Sir J. W. Maclure, M.P., hoped that it would be discussed calmly and deliberately and that before any decision was come to or any sub-committee appointed there should be a reasonable opportunity for meeting and "talking the matter over in a thoroughly friendly spirit. He did not want it referred, as on a former occasion, to a small committee which perhaps did not carry out the views of the board or of the corporation." The occasion is sufficiently momentous to justify these remarks.

May 30th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

Victoria Hospital for Consumption and Diseases of the Chest.

ON May 26th and 27th a sale of work was held in the grounds of the Victoria Hospital for Consumption at Craigleith in aid of the funds of the institution. At present there is accommodation for only 16 patients, but it is proposed to extend the hospital so as to provide beds for 100 patients. The sale of work was opened on May 26th by General Wauchope and on May 27th by Sir Alexander Kinloch of Gilmerton, a member of the acting committee. The latter, in his opening remarks, said that the committee felt that £50,000 were necessary for the work of extension, but that they would proceed with less than that. The takings for the two days amounted to about £300.

The Epidemic of Typhoid Fever at Bathgate.

At a special meeting of the Burgh Commissioners on May 26th the report by Mr. Ivison Macadam on the examination of the samples of water sent to him was submitted. From this it appeared that the water from the Sunnyside Reservoir was pure and wholesome, while that from the Petershill Reservoir was not so pure, showing a higher proportion of the ammonias and chlorine, with a trace of nitrates. There was little doubt that the objectionable matters were derived from road washings and the drainage of Limefield Farm. From the bacteriological examination, carried out in the research laboratory of the Royal College of Physicians of Edinburgh it had been shown that of the unfiltered waters the water of the Petershill Reservoir contained many more germs than that of the Sunnyside Reservoir. No bacilli of the typhoid group were, however, discovered. The report went on to state that the Sunnyside water might be used as soon as it was filtered and that the Petershill water might also be turned on to the burgh after the proper measures had been taken and after the filters were in working order. The report from the medical officer showed a decrease in the average number of cases reported since the last meeting. There were now 28 cases under treatment in the temporary hospital. Two patients had died and two had been discharged cured. he worst of the epidemic apparently was past.

Tuberculosis.

The Public Health Committee of the Aberdeen Town Council met the other day to consider the report by Dr. Hay, medical officer of health of the city, containing suggestions for the prevention and control of tuberculous disease. Certain of the clauses were agreed to and others will be kept in view. With regard to the question of a sanatorium for phthisical patients it was resolved before agreeing on any recommendation to hold a conference with a committee of the Aberdeen branch of the British Medical Association. Consideration of

the suggestion of providing a public sterilisation station for milk was postponed, but with regard to the establishment of a municipal slaughter-house the committee repeated the former recommendation in favour of such a scheme, and further recommended that the plans of a proposed extension and reconstruction of a slaughter-house in Wales street belonging to the Flesher Incorporation should accordingly be disapproved of.

Scottish Inter-University Sports.

It has been arranged to hold this meeting on June 24th at the University Recreation Grounds beside King's College, Aberdeen.

Graveyard Scandal in Aberdeen.

A serious graveyard scandal has arisen in connexion with Nellfield Cemetery, which is the property of, and is managed by, the Aberdeen Baker Incorporation. In the course of a civil action against the Incorporation for damages for desecration of a certain grave sensational disclosures as to overcrowding of graves and other objectionable practices in the general management were made, which have led to the Crown authorities arresting the superintendent on a criminal charge of tampering with a grave and committing perjury in giving evidence as a witness in the civil action referred to. The Incorporation have resolved to compromise the civil action, which is, however, likely to be followed by others of the same kind. They have also dismissed the superintendent and raised an action at ordinary law against him for damaging the prospects of the cemetery. The matter has created a painful feeling and locally a suggestion has been made for the establishment of a properly conducted crematorium, while it remains to be seen whether the sanitary authorities will take any steps for the further regulation of intramural interments.

May 30th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

Royal College of Surgeons in Ireland.

THE report of the Royal College of Surgeons in Ireland for the year ending April 5th, 1899, has just been issued and sent to the Fellows of the College. The auditors' certificate shows that there has been a decrease in the examination fees received during the year. This signifies that the number of candidates for the Licence and Fellowship of the College has become less and a suggestion has been made that it may become necessary to lower the Medical School lecture fees at all the schools of Dublin in order to prevent the present exodus of Irish students to Edinburgh, where the Licence can be got for a lower fee and where the lecture fees are also somewhat lower than in Dublin. The coming election of Council which will take place on June 5th will be influenced by this important question and candidates who are known to favour the suggested change will receive a large measure of support. The new candidates for a seat on the Council are Mr. John B. Story, Mr. J. Dallas Pratt, Mr. Robert Glasgow Patteson, Mr. F. Saunderson Morrison, Mr. Robert Woods, and Mr. Richard Bolton McCausland. The number of rejections of candidates at the College examination in the subject of physiology has long been a source of trouble to the Council. Their report states that a conjoint committee of the Royal Colleges of Physicians and of Surgeons have advised that the subject should be divided into a junior and senior course and that a syllabus of the junior course should be drawn up by the examiners.

Dr. Steeven's Hospital, Dublin.

At a meeting of the governors of Dr. Steeven's Hospital held on May 26th Dr. T. Percy Kirkpatrick was appointed anæsthetist and clinical registrar to the hospital.

Belfast Union Infirmary.

At a meeting of the Belfast Guardians held on May 23rd it was decided, at the suggestion of one of the lady members of the board, to appoint a night superintendent of nurses at a salary of £40 per annum, with rations and apartments. It seems at present that there are 1936 patients in the infirmary and at night there are 11 nurses in charge of them—that is, one nurse for 176 patients. Of these nurses only two are fully trained, two others have three years' experience, and the remaining seven are probationers. Where so much of the nursing is unfortunately in the hands of paupers a night superintendent is doubly important.

Belfast Maternity Hospital.

On May 26th a fancy fair and *fête* was opened at Stormount Castle, Belfast (kindly lent by Mr. and Mrs. Allan), by the Marchioness of Dufferin and Ava in aid of the funds of Belfast Maternity Hospital, one of the oldest charities in Belfast. The old hospital—it has attained its century—has been patched up and added to, but it is wisely proposed now to pull it down and to build a new up-to-date one in its place. The present fancy fair was to raise half of the required money for this purpose. The Committee wanted £7000 and the Ladies' Committee have already raised £3000. On the 27th the bazaar, which was opened on that day by the Lady Mayoress, was continued. A considerable sum of money has been raised.

Amalgamation of Workhouses in County Derry.

At a meeting of the Coleraine Guardians on May 27th a resolution was passed to consider the question of the amalgamation of the workhouses of the county and if possible to arrange that a portion of them should be set aside for asylum purposes. There is a strong feeling that the system of maintaining three large and expensive establishments at Magherafelt, Limavady, and Coleraine is a waste of public money. These three workhouses were certified to accommodate 2342 persons as follows: Coleraine, 815; Magherafelt, 858; and Limavady, 699. Last year the number of inmates in Coleraine workhouse averaged 160, Magherafelt 125, and Limavady 105, or a total of 390 in establishments where accommodation was provided for 2342. The cost of keeping such institutions in repair is heavy, while the expenditure on officials is a very large item. There are many in the county of Derry who think that the spending of a sum of £20,000 on one of these institutions in making it suitable for asylum purposes would be vastly better than the expenditure of £180,000 or £200,000, as is proposed, on a new asylum in Derry City at one end of the county. A sum of £30,000 would, it is alleged, give sufficient asylum accommodation for the next half century. A committee (consisting of members from the three workhouse boards) is to approach the county council on the question.

County Down Health Resorts.

In these days, when foreign health resorts are so much lauded, it may interest medical men to note that the mean readings of the barometer and the thermometer for 12 months ending May 14th at the following County Down health resorts were as follows:—

	Barometer.	Thermometer.		Barometer.	Thermometer.
Newcastle ...	29·55	50·50 F.	Donaghadee ...	29·86	50·75 F.
Ardglass... ...	29·89	50·25 F.	Bangor	29·79	49·50 F.

The readings were taken from standard instruments placed in the shade.

May 30th.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

The Illegal Practice of Medicine.

A MAGNETISER who calls himself Dr. Edouard has just been prosecuted for illegal practice. He has a great many patients, chiefly women. An examining magistrate went to his rooms as a patient and was present at a consultation at the end of which he made himself known in his magisterial capacity. The other patients protested energetically, saying that they had received every attention and declared their intention of attending at the court on the day of Edouard's examination to give evidence that they had benefited by his treatment.—At the Municipal Council a question was addressed to the Director of the Assistance Publique concerning the doings of a person who was in the habit of giving advice at the Lariboisière Hospital. He had done this for the last three years and had passed himself off as a doctor of medicine, whereas he was no more than an oil broker. Besides his undergoing prosecution for illegal practice he was summoned by a patient for indecent assault—by a singer at a café concert who was furious that he should have examined her in a manner permitted to real medical men alone.—The Syndicate of Masseurs and Magnetisers of France has just

held its annual meeting. These persons, who devote themselves entirely to the illegal practice of medicine, have passed a resolution that a petition should be sent in to the Chamber of Deputies that a law should be passed giving them the right to exercise their *art* on the sick. As a matter of fact, they are at present very rarely prosecuted and if they are they get off with a small fine. Quacks of all kinds are largely tolerated in France; but this is not enough for certain Socialist Deputies who, wishing to do away with every kind of privilege, now desire that all quacks should be registered as medical practitioners although they may have received no medical training whatever.

Proceedings against a Practitioner Abandoned.

Last year a medical man was prosecuted by a patient upon whom he had operated. She accused him of malpraxis. While curetting her uterus he had perforated that organ with a Hegar's dilator. At that moment the patient showed signs of chloroform syncope and the operator having his attention distracted by this and knowing that the dilator was aseptic left it until he could remove it on another occasion. However, the patient absolutely refused to undergo another operation and despite the entreaties of the medical man he never saw her again. Many months afterwards she was attacked with acute abdominal pain and went into the St. Louis Hospital where Dr. Gérard-Marchant performed a laparotomy and was much surprised to find an encysted dilator. Dr. Gérard-Marchand made the mistake of then and there calling the attention of his pupils to the mistake made by the former practitioner and also read a paper on the case at the Society of Surgery. The patient, having got wind of this went to the first medical man and demanded 1500 francs as damages and he to get rid of her promised to pay in three instalments. But he did not pay and changed his residence. A little later the woman met him in an omnibus when she made a regular scene and the police had to be called in. The medical man was then summoned for wounding by carelessness. An expert inquiry was ordered and a commission—composed of M. Brouardel, the Dean of the Faculty; M. Berger, Professor of Clinical Surgery; and M. Toinot, a graduate in legal medicine—investigated the case. They have sent in a long report to the judge in which they declare that the medical man had operated in conformity with the recognised rules of surgery and that no imprudence could be alleged against him. The judge therefore stopped the case.

The Power of Mayors to Issue Sanitary Regulations.

The Conseil d'État has just quashed a regulation issued by the Mayor of Orleans with regard to the sanitary regulation of public and private schools. The mayor had issued a very elaborate set of regulations forbidding any school to receive a pupil before such school had procured a certificate that it was in a sanitary condition, also a statement had to be sent to the Mairie detailing why the certificate had been granted or the reverse. Details also had to be given about ventilation, cleansing, and the like. The Conseil d'État, although unable to pass the mayor's orders, yet recognised that a mayor by virtue of a municipal regulation had the right to try to prevent or put a stop to epidemics; he equally had the right to inspect schools and to order their closing in time of epidemics; but although possessing repressive powers he had no preventive powers to enable him to impose a permanent set of regulations dealing with hygiene upon masters of private schools. The Conseil d'État only decided on the matter of private schools although the mayoral regulations dealt both with private and public schools. It is not yet decided what the law is with regard to the latter.

Sanatoria for the Tuberculous.

In consideration of the Congress on Tuberculosis now sitting in Berlin the Therapeutical Society at its meeting of May 24th discussed the question of sanatoria. M. le Gendre, M. Huchard, M. Bardet, M. Bouloumié, M. Maurange, and M. Duhourcan spoke and the following conclusions were adopted: 1. Sanatorium treatment considered from a disciplinary, hygienic, and dietetic point of view is the best for tuberculosis which has yet been practised. 2. The best sanatorium is one where climatic advantages can be superadded to those proper to the sanatorium itself, such as diet and the like. The society enters its protest against the assertions of some medical men that climate is of no importance. 3. The society considers that sanatoria, each for a limited number of patients, should be established throughout France under such varying conditions of climate and altitude as should meet all varieties of cases and they should certainly be established near the thermal bath centres. 4. That winter stations should, if possible, be planted as near as may be to the summer stations so that treatment may be continued without a break throughout the year. 5. The society invites the municipal authorities of health resorts to carry out both in their own interests and in those of the patients all such hygienic measures as are recognised to be of indisputable value and to further the erection of sanatoria for the tuberculous. 6. The society protests most strongly against the admission of phthisical patients into the wards of a general hospital as being a violation of the elementary laws of hygiene, and considers that sanatoria where poor patients might be treated gratuitously should be provided in the vicinity of populous centres.

May 30th.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

Medical Courts of Honour.

THE Bill on medical courts of honour, to which allusion has repeatedly been made in these columns,[1] has been read for the first time in the Prussian Diet and was then referred to a committee of the House to consider eventual alterations. There is no doubt that this Bill will become law, and as it is one of the most important of the legislative measures affecting the medical profession the discussion on its utility continues in the medical associations as well as in both the medical and the lay press. The Minister in introducing the Bill declared in Parliament that the Government was sure to meet the wishes of the medical profession as expressed by the votes of its representatives, the medical chambers. In order to refute this assertion an unofficial committee of five distinguished medical men—Dr. Alt and Dr. Wetzel of Charlottenburg, Dr. Asch of Breslau, Dr. Cnyrim of Frankfort, and Dr. Schleich of Stettin undertook a collective investigation by sending voting cards to every member of the profession in Prussia and asking them to answer the following questions: (1) Whether the medical man in question was opposed to any Bill on courts of honour whatever its provisions might be; (2) whether he approved of the present Bill; and (3) whether, though disagreeing with some of its clauses, he would approve of the Bill in general provided some alterations were introduced. As the new Bill refers to Prussia only and not to the other States of the empire these queries were sent exclusively to medical men practising in Prussia. Of 14,894 cards which were sent out 7705 were returned with answers, the result being that 3029 medical men voted against any disciplinary power of the medical courts of honour; only 750 approved of the Bill as introduced by the Government; and 4598 wished courts of honour to be instituted, but under the condition that important alterations were introduced in the Bill. A summary of this expression of opinion has been communicated to the Prussian Parliament but it is not likely to have any influence on the decisions arrived at.

The Nursing Exhibition.

The Nursing Exhibition which is being held in connexion with the Congress on Tuberculosis was opened on May 20th in presence of a distinguished assembly, including the Minister of Public Instruction. The proceedings began with addresses delivered by Professor von Leyden, Dr. Schjerning, the Mayor of Berlin, and the Minister of Public Instruction. The company were then shown over the building by the secretary, Dr. Mendelssohn. The exhibition contains models or examples of everything that is new in the way of beds, systems of ventilation and heating, barracks, tents, drugs, surgical instruments, and every kind of nursing requisite. Some prize medals will be awarded by a jury.

Berlin Surgical Society.

Two very rare cases were lately shown to the Berlin Surgical Society by Professor Hahn. A man admitted into the Friedrichshain Hospital with severe pain in the stomach and abdomen, vomiting, and constipation, was found on palpation to have a large abnormal structure occupying his right abdominal region and laparotomy was performed as the case

[1] THE LANCET, April 25th (p. 1178) and Dec. 26th (p. 1856), 1896; Jan. 29th, 1898, p. 336; and Jan. 28th, 1899, p. 269.

was believed to be one of ileus caused by malignant tumours. When the abdomen was opened a condition of its contents was found which none of the surgeons had ever seen, for the serous membrane of the intestines was covered with an enormous mass of blisters of different sizes varying from that of a pea to that of an apple. The pathologist to the hospital was therefore sent for who declared the case to be one of "pneumatosis cystoides intestinorum," a condition known to occur in pigs but, as far as he was aware, never before observed in human beings. The blisters were for the most part destroyed by compression, bursting with a loud report. The wound was then closed and the patient very soon recovered. Photographs of the intestines taken during the operation were shown to the society. Professor Hansemann expressed the opinion that the disease might be due to bacteria, although no micro-organisms were discovered. Another interesting case was that of a man who had been run over by a carriage and suffered from a severe crush of the chest, fractures of several ribs, and dyspnœa which increased very rapidly. There was dulness on percussion over the left side of the chest and hæmatothorax was therefore supposed to be present. A puncture was made but yielded instead of blood a milky fluid which on microscopical examination proved to be lymph. In order to relieve the patient tapping had to be repeated 14 times during the next few weeks and 26 litres (45½ pints) of lymph were discharged. The patient died on the twenty-sixth day after the injury. It appeared from the necropsy that the eighth and ninth ribs and the tenth dorsal vertebra were fractured, and an injury to the thoracic duct had permitted the escape of chyle into the pleural cavity. Cases of this kind are very rare. THE LANCET of May 13th (page 1313) contains an article on the subject.

May 29th.

ROME.

(FROM OUR OWN CORRESPONDENT.)

Yellow Fever at Buenos Ayres.

THE close connexion between the Brazils and the Italian Kingdom (of whose 190,000 emigrants per annum the majority swells the population of those regions) explains the anxiety caused by the announcement that yellow fever was epidemic at Buenos Ayres. From a correspondent I heard that the "fevre amarella" (to give it its local name) had for two days preceding April 29th been present in that port; that in the floating lazaretto moored in the offing Dr. Otero (its director) had many cases under treatment; and that there was much apprehension that the city was "in for" a return of the epidemic which in 1870-71 decimated its inhabitants. Information just received at official quarters, however, modifies materially the situation, which turns out to be grave indeed, but not so grave as to justify the alarmist measures at first adopted. The "Autorità Sanitaria" of Buenos Ayres reassures the local and outlying world by a history of the outbreak which it traces to a Brazilian who landed at that port last February. He went to the Villa Sanguinetti at Belgrano and there succumbed to undoubted yellow fever. His case was not reported as it ought to have been to the hygienic officer and it was followed by another death from the same cause—that of a girl, 12 years old. After these, and always at Belgrano, three other distinctly marked cases occurred. Something like a stampede ensued and among the fugitives who found shelter in Buenos Ayres a lady also died from the fever. On May 2nd no new case was announced and it is now held that the epidemic is in full defervescence. For this no doubt Buenos Ayres has its improved hygiene to thank. Since the terrible experience of 1870-71 she has made herself "una delle città più sane del mondo intero" (one of the healthiest cities in the whole world) and in addition to this first line of defence has enjoyed subsidiary advantages which have told effectively in her favour. For one of these the season has proved adverse to the diffusion of yellow fever. The bacillus icterodes, as Professor Sanarelli of the Hygienic Institute at Montevideo has amply demonstrated, does not develop in a temperature of below 21° C.—the temperature prevailing in the Argentine capital; and, besides, the more enlightened views promulgated as to the pathology of yellow fever by Professor Sanarelli himself have sensibly diminished the panic which on former occasions reinforced if it did not actually invite the disease.

"The Cholera among Poultry."

The "further research" into this widespread, destructive, and somewhat obscure epidemic—research indicated as in progress in THE LANCET of May 6th, p. 1261—has resulted in a memoir read on the 19th of the same month by Dr. Carlo Mazza of Turin before the Accademia Medica of that city. Experiments conducted by him in the Istituto d'Igiene attached to the University on a large number of fowls provided for this purpose by the municipality and prefecture seem to have put it beyond doubt that these animals were the subjects of "una infezione dovuta ad un microrganismo morfologicamente e biologicamente diverso da quello che si è sempre considerato sino ad ora come causa del cosidetto cholera od epizooia tifoide dei polli" (an infection due to a micro-organism morphologically and biologically distinct from that which has hitherto been always regarded as the cause of the so-called cholera or typhoid epizooia in poultry). The micro-organism referred to, when inoculated in pure culture in the animals under experiment (rabbits, fowls, and pigeons), invariably induces death, with lesions rather different from those observed in the typical cholera of "poultry." Dr. Perroncito, extraordinary professor of parasitology in the Subalpine School, while acknowledging the care and the cogency of Dr. Mazza's experiments and findings declared himself unshaken in his opinion that the epizooia under discussion was a true cholera, while Dr. Abba, a very accomplished bacteriologist of the same seat of learning, announced his inability, after many trials, to isolate the cholera bacillus in the infected fowls. He had, however, succeeded in isolating a bacillus morphologically cognate, if not identical, with that found by Dr. Mazza. So there, as far as the Turin investigators have gone, the matter rests. The findings of their Milanese colleagues have yet to be made public.

The Late Professor Landi.

The medical faculty of the University of Pisa has just unveiled in the clinical amphitheatre a tablet in memory of Dr. Pasquale Landi, for 25 years professor of surgery in that school. The spokesman of the occasion was his successor in the chair, Dr. Antonio Ceci, who, in an eloquent discourse, dwelt on the signal success with which as operator and teacher Professor Landi improved upon the best traditions of his precursors. He was an ardent promoter of the new methods and on Sept. 27th, 1868, he performed the first ovariotomy attended with a favourable result in Italy. He was particularly successful in cases of vesical calculus, and, indeed, was second to none of his Italian contemporaries whether in the operating theatre or in the professorial chair. All this he achieved amid the scanty clinical resources enjoyed by the Pisan School, for the rehabilitation of which, so as to bring it level with European competitors of far inferior historical renown, Professor Ceci made an urgent and (it is to be hoped) not ineffective appeal.

May 28th.

CONSTANTINOPLE.

(FROM OUR OWN CORRESPONDENT.)

Vaccination and Revaccination.

As has been already announced the Sultan has issued an Iradé ordering the vaccination or revaccination of the entire population of his capital. This order has been acted on and from Feb. 1st last to April 4th there were 59,235 vaccinations or revaccinations performed. Constantinople is divided into 12 municipal circles, of which the first, third, ninth, and tenth have had all their inhabitants vaccinated or re-vaccinated the vaccinators having visited all the houses without distinction, knocking at all the doors one after the other. In the sixth municipal circle, in which are Pera, Galata, and Tataola, 19,118 vaccinations were performed, 17,409 of the persons operated on having been previously vaccinated. It seems that of these 59,235 vaccinations 20,000 proved successful. Deaths from small-pox, nevertheless, continue to occur. During the week ended May 8th there were six deaths from this disease registered. 10 years ago,

when the foundlings of Pera were under the care and protection of Dr. Zavitziano, not one of them contracted small-pox.

Measles and Typhoid Fever.

Measles and diphtheria are prevalent just now, the latter disease being of a very mild type. Typhoid fever has always some victims. During the last two months two American young ladies have suffered from it, but they were ill at the time of their arrival in Constantinople, one of them having caught the disease in Cairo. Both are now doing perfectly well.

Pilgrims.

The pilgrims are by this time making their way home. According to the latest intelligence there have already quitted Jeddah 8000 bound for the north and 6000 bound for the south. The above-mentioned 8000 pilgrims are already undergoing their 10 days' quarantine at El Tor where, according to official statements, their health is quite satisfactory, as only 40 of them are ill, these being cases of ordinary chronic diseases. They are well supplied with both food and water, but in previous years the pilgrims undergoing quarantine at this lazaretto complained that the food was deficient and the water filthy. No fresh plague cases have been reported from Jeddah since May 11th.

May 18th.

Obituary.

HENRY GREENWAY, M.R.C.S. ENG., L.S.A.

MR. GREENWAY passed away at his residence at Plymouth on May 29th, aged 70 years. He was born at Launceston and while a youth went to Plymouth and was educated at the Devonport Grammar School. He was apprenticed to Messrs. Rendle and Square, then well-known surgeons in Plymouth, and subsequently went to London where he studied medicine at King's College Hospital until he qualified as Member of the Royal College of Surgeons of England in 1851. He returned to Plymouth and was soon appointed assistant surgeon to the Plymouth Provident Dispensary. Later he was appointed medical officer of health of Plymouth, in which capacity he did some excellent service for the borough. When the Borough Infectious Diseases Hospital came under the supervision of the medical officer of health the late Mr. Greenway was the cause of many sanitary improvements being carried out. Realising the inadequacy of the old Fever Hospital for an increasing population he urged the purchase by the corporation of the site on which the Borough Hospital now stands at Mount Gould. The council hesitated to buy the site since the area was larger than they needed at the time and Mr. Greenway bought the lot and offered to resell to the corporation at the same price as much land as they required. Ultimately the council bought the whole of the site, upon which an admirable isolation hospital was built. When nearly 10 years ago Mr. Greenway retired from the position of medical officer of health, in recognition of his long and valuable services he was appointed consulting medical officer of health. The deceased gentleman also held the post of consulting ophthalmic surgeon to the Plymouth Provident Dispensary and at one time was the medical superintendent of the Borough Fever Hospital. He was the inventor of several surgical appliances and instruments, including a grasping splint for fractures of the leg, a leg suspender and bed-guard, suction instruments for ophthalmic surgery, an improved ophthalmoscope, and an irrigating apparatus. He also contributed to the medical journals, two of his subjects being the Treatment of Constitutional Syphilis, Pneumonia, and Bronchitis by Carbolic Acid, and the Treatment of Tuberculous Meningitis by Phosphorus. Mr. Greenway, who was a bachelor, will be greatly missed not only by his personal friends but also by all the inhabitants of Plymouth for which town he did so much good work.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.—The deaths of the following eminent foreign medical men are announced:—Dr. Simon Samuel, Extraordinary Professor of General Pathology and the History of Medicine in Königsberg. He was the author of a number of papers on Inflammation and on the Hypodermic Infusion of Saline Solutions in Cholera. He also published two works on Pathology and together with Eulenburg a valuable work on General Therapeutics.—Dr. F. Reder of Rostock, for many years editor of the official organ of the Mecklenburg Medical Society.—Dr. Isaak Major, Honorary Professor of Anatomy in the University of Geneva, at the age of 81 years.

THE GENERAL COUNCIL OF MEDICAL EDUCATION AND REGISTRATION.

THE Programme of Business of the General Medical Council more than justifies our forecast of the arduous work before it. The agenda include nearly 50 distinct subjects which can scarcely be disposed of in less than nine or 10 days.

The proceedings began with a short and practical address from the President who gives an amount of attention to the business and displays an amount of personal interest in it which are remarkable in one of the busiest of Scottish professors and in the President elect of the British Association. Sir William Turner is no nominal President, but really controls the proceedings and exercises the authority of the chair, sometimes somewhat sternly, perhaps, but in perfect temper.

The first discussions of the Council nearly always turn on the tables of the various professional examinations. These tables give the results of preliminary examinations, the statement of degrees, diplomas, and licenses of candidates for vacancies in the Medical Department of the Royal Navy and the number who did and did not pass, a similar statement respecting candidates for commissions in the Royal Army Medical Corps, and another with regard to candidates for the commissions in the Indian Medical Service. These tables are not drawn up intelligibly (as we have pointed out) and a few striking figures are apt to tempt unwary critics to draw conclusions from them. Mr. George Brown's attention was taken with the figures of the Final Examination of Victoria University, and he ventured to draw inferences from them and from apparently corresponding figures of other Universities and bodies, notably those of the Final Examination of Edinburgh University, which inferences drew down on him the heavy artillery of the President who so ably represents that historical school. Mr. Brown can speak, as he showed on Wednesday, with moderation and point; but on occasions he suffers himself to be carried away by the whirlwind of his own eloquence. The effect on the mind of the Council in this instance was unfortunate and gave the chairman of the Examination Committee an easy victory when it was properly proposed that his committee should undertake to analyse these important returns or at least to get them formulated for the future on some more intelligible and uniform plan, admitting of fair conclusions. All proposals to turn these elaborate tables to some use were successfully met by that somewhat rough and uncivil weapon—the motion "to pass to the next order of the day."

The sitting of Tuesday ended at 4 P.M. The only other matter of interest disposed of on that day was the providing of facilities for the inspection of documents. This was at one time considered to be a burning question. But

there never was much real fire in it, the general feeling of the Council being that the freedom of members to inspect documents should only be limited by precautions for the safety and care of the documents. This was perceived by the Executive Committee whose recommendations were accepted with little alteration.

On Wednesday two questions of great interest were discussed with creditable temper and judgment. The one was a proposal by Mr. Brown to increase the Direct Representation of England and Wales by one additional member, as provided for in the Act of 1886. Mr. Brown's speech in supporting this proposal has been universally commended for its moderation. The opposition of the Council to all such proposals is deep and ineradicable; but it did not take the rough form of the previous question. The members of the Council took trouble to state their objections. The result was, of course, an overwhelming adverse majority, but the general impression left was that ere long occasions will arise for the re-discussion of this proposal with considerable chance of success. Much will depend in the meantime on the Direct Representatives themselves and their action on the Council.

Another serious question was raised on Wednesday—viz., that of reciprocity in the matter of the recognition of the right of foreign practitioners to practise in England either generally or amongst foreigners resident here. The question is none of the Council's raising, but was brought to its attention by communications from the Italian Ambassador to the Foreign Secretary, and transmitted from the Lord President of the Council to the General Medical Council for its observations. This question has generally been raised on the complaint of English practitioners resident abroad—in France or Italy—when threatened with legal prohibitions to practise without taking the qualifications of the country in which they desire to work. The presentation of the question in the reverse way comes to us with somewhat startling effect as the discussion on Wednesday showed.

The question is a large one and cannot be viewed narrowly or without recognising the significance of the sections of the Act of 1886 having reference to it. The General Medical Council has repeatedly made itself the champion of complaining English practitioners. It must not now be insensible to the larger aspects of the matter. But it must at the same time safeguard the interests of the British public and of the medical profession of the United Kingdom. The question is temporarily adjourned for the opinion of the counsel of the Council as to the possibility under the Act of 1886 of restricting the right of foreigners to practise among foreigners resident here.

TUESDAY, MAY 30TH.

THE sixty-seventh session of the General Council of Medical Education and Registration commenced to-day in the Hall of the Council in Oxford-street, London. Sir WILLIAM TURNER, President of the Council, occupied the chair and there was a full attendance of members.

The Appointment of Dr. Pye-Smith.

Mr. ALLEN, Registrar and Clerk to the Council, read a notification by the Senate of the University of London of the appointment of Dr. Pye-Smith to represent the University of London in succession to the late Sir William Roberts.

Dr. PYE-SMITH was introduced to the President of the Council by Dr. CHURCH and took his seat at the table.

The President's Address.

The PRESIDENT then delivered his introductory address. He said: At our last session the Council approved of a recommendation in a report by the President and Treasurers that another storey should be added to the Oxford-street front of our office and plans and estimates were submitted and approved. During the winter and spring the contractors, under the supervision of the treasurers, have been engaged in carrying out the plans of the architect, Mr. Woodd. The Council will, I trust, approve of the alterations, now approaching completion, which will give us the additional room required for the transaction of our business and will promote the comfort of members of the Council. I may also call attention to the recent addition to our collection of memorials of former Presidents by the gift of the bust of Sir George Burrows which through the liberality of Sir Frederick Burrows and Mr. Alfred Willett now adorns our hall of meeting and completes the series of portraits or busts of our past Presidents. The Council will, I am sure, join with me in expressing our sorrow at the death of Sir William Roberts, the representative of the University of London during the past three years. The distinction which he had attained as a scientific and practical physician and his loveable nature had endeared him both to members of the Council and to all who knew him. We welcome as his successor another distinguished graduate of the University, Dr. Philip Henry Pye-Smith, whose professional position and literary and scientific culture will add to the value of our debates and assist us in our deliberations. From a communication received from the Home Office on the subject of death certification I was given to understand that the introduction of a Bill to amend the law on this subject came within the province of the Local Government Board and not of that of the Home Secretary to whom communications on behalf of the Council had previously been made. I accordingly addressed a letter to the President of the Local Government Board on the subject and had an interview with the permanent secretary. In reply I have been assured that the representations made will receive the consideration of the Board, but that the President regrets his inability to bring in a Bill during the present session. Since the Council rose in November last I have, with the approval of the Executive Committee, placed before the medical authorities two clauses drafted by Mr. Muir Mackenzie on the question of the suspension of the right to use a title or titles by persons whose names have been erased from the Medical Register for criminal or professional offences so long as the erasure of a name or title remains in force. From the replies which have been received it is obvious that only a minority of the medical authorities are prepared to accept these clauses. Objections of various kinds are stated in the replies which have been sent by the majority of the bodies interested. I have embodied the replies in two interim reports, which I have presented to the Executive Committee and which will be circulated amongst members of the Council. Acting under a remit from the Executive Committee Mr. Muir Mackenzie has considered objections which have been made by a number of the medical authorities to the clauses as originally drafted and has suggested amended clauses which whilst carrying out the Council's objects will, it is hoped, remove the difficulties expressed by these authorities to the clauses originally submitted to them. The committee of the Council appointed a year ago to obtain, if possible, an amendment of the law to restrain companies from conducting the practice of medicine, surgery, and dentistry have continued in communication with the Lord Chancellor on this subject. I have the satisfaction to state that the Lord Chancellor has introduced a Bill into the House of Lords which, should it become an Act, will render it unlawful for a company under the Companies Acts to carry on the profession or business of a physician, surgeon, dentist, or midwife, and if any company contravenes this enactment it shall be liable on summary conviction to a fine not exceeding £5 for every day during which the contravention happens. I have received from Mr. C. R. Hodgson, secretary to the College of Preceptors, a letter in which he criticises the report of the Council's Education Committee of November last in so far as it bears on the preliminary examinations conducted by the College of Preceptors. In this letter Mr. Hodgson calls my attention to what he alleges to be serious errors of statement and fact in the report and asks me, as President, "to deal with the matter in such a way as will result in the practical revision of the report and of the conclusions arrived at on incorrect data." As the statement in Mr. Hodgson's letter reflects on the accuracy of the report of the Council's Education Committee I have brought the communication and two prints which accompanied it to their notice, and have requested them to furnish me with any observations they may wish to make upon it during the

present session. As it is obvious that the question of the standard of general education to be aimed at for entrants to the medical profession is one which affects not only our profession but the authorities engaged in school education as well as those who test by examination the attainments of candidates, the Council will be pleased to see the efforts which are being made by our Education Committee to obtain, from a wide range of authorities on general education, information which may help us to reach a satisfactory conclusion. Owing to the number and importance of the replies the committee will, I understand, ask the Council to extend the period of reference so that they and other Members of Council may have time to analyse and digest the communications which have been received. Several cases of discipline will come before you. In one of these the question is raised, I think for the first time, whether a registered medical practitioner, the salaried officer of a provident dispensary, is to be regarded as covering an unqualified person who not only acts as dispenser but, it is alleged, visits and prescribes for the patients attending the dispensary. The said dispenser is, it is said, not engaged by the practitioner but is in the employ of the committee of the dispensary, and the medical officer affirms that he has given no consent to the dispenser visiting his patients. As several members of the Council have expressed a wish to have the facts appertaining to the case of the late Mr. H. K. Hunter arranged in a form to enable the Council to follow it in its several stages should it become the subject of discussion I have directed a narrative of the case to be prepared, copies of which will be placed in the hands of members of the Council. The Council's solicitor has also, at the request of the Penal Cases Committee, prepared a report on the legal proceedings which is appended to the narrative. As the narrative contains extracts from the Minutes of the Penal Cases Committee and from the Minutes of the Council sitting *in camerâ* I have marked the print, "Confidential, for Members of Council only." The Council will have presented to it during the session reports both from its standing committees and from special committees appointed to consider and report on the Midwives Bill, on the Companies Acts Amendment Bill, on medical aid associations, as well as other matters of interest and importance.

On the motion of Dr. MACALISTER, seconded by Mr. BRYANT, the President was thanked for his address and requested to allow it to be printed in the minutes.

Business Committee.

The following members were appointed to form the Business Committee—viz.: Dr. MACALISTER (Chairman), Mr. BRYANT, Sir PHILIP SMYLY, and Dr. BRUCE.

Results of Examinations.

Mr. ALLEN brought up the following tables, viz.:—

(*a*) Table showing results of professional medical examinations during 1898; (*b*) table showing results of professional examinations for qualifications in sanitary science, public health, or State medicine during 1898; (*c*) table showing results of professional dental examinations during 1898; (*d*) table showing results of preliminary examinations during 1898; (*e*) table showing exceptional cases in regard to length of course of study during 1898; (*f*) table showing results of competition held on May 8th, 1899, for commissions in the medical staff of the Royal Navy; (*g*) table showing results of competition held in February, 1899, for commissions in the medical staff of the Army; and (*h*) table showing results of competition held in February, 1899, for commissions in the Indian Medical Service.

The tables were formally received and a motion was passed thanking the Director-General of the Royal Navy, the Director-General of the Army Medical Service, and the Under Secretary of State for India for the information which they had furnished.

Mr. GEORGE BROWN said that before the Council proceeded to the next business he wished to call attention to one or two matters in these tables which he thought deserving of special consideration. He desired particularly to call attention to Table (A) showing results of professional examinations held in 1898 for qualifications granted under the Medical Act by the bodies named in Schedule (A) of the Act. They would find that the Victoria University in Part I. of the Final Examination had 33 rejections and 58 passes and in Part II. 41 rejections and 35 passes. Now he thought it would strike every member of the Council that there must be something radically wrong when they had in these examinations more than half of the number of candidates rejected. The candidates must be exceedingly ill-prepared or else the examinations must be of a particularly obtuse and erratic character. These candidates must all have had the advantage of the services of tutors who were familiar with the lines of previous examinations. Now, if they turned to the case of the University of Edinburgh they would find that for the M.B. and C.M. examination there were 18 rejections and 62 passes and for the M.B. and Ch.B. examination there were 11 rejections and 137 passes. What was the inference that must be drawn from a comparison of these figures? He did hope that the representatives of the bodies would give the Council some information. What he said was that in the one case the candidates must have been very inefficiently prepared or the questions must have been far beyond them, whilst in the other case the men must have been exceedingly well prepared or the questions must have been singularly down to their level; and he thought that it was the duty of the Council to find out how this state of things came to exist. He knew that men feared to go to the examination in the one case and that they rushed off to the other. He knew that men went away from these examinations where the chances of getting through were so small and presented themselves to take out their courses at universities where they thought they had a better chance. That was natural, but he said it was a state of things which should not exist. It was the sort of thing which reflected on that Council and therefore he moved that a special committee be appointed to examine and report as to the number of passes and rejections in the Final Examinations of the University of Edinburgh and the Victoria University.

Mr. HORSLEY said he desired formally to second the motion because he thought, having regard to the obvious inequalities pointed out, that there should be a special inquiry.

Dr. MCVAIL: I wish to ask Mr. Brown does he know persons who have failed at Victoria University who have afterwards gone to Edinburgh University and got a degree there?

Mr. BROWN: I did not say that I knew such persons.

Dr. MCVAIL: Does Mr. Brown say that he knew of such persons?

Mr. BROWN: I did not say that I knew of such persons.

Dr. MCVAIL: I and others at this end of the table understood him to say so.

Mr. BROWN: I said that students are prevented from going to the Victoria University and other places where the examinations are very strict and go to those where they have a better chance of passing.

Dr. MCVAIL, continuing, said he would like to know whether Mr. Brown had gone into the matter thoroughly and compared the results over a period of years or whether he had simply taken the results in this particular table. Did he mean to insinuate that the University of Edinburgh had for so long been granting degrees upon so easy terms that men were induced to go there from Manchester, Liverpool, and Leeds, the three centres of the Victoria University, for an easy pass? Anyone who knew anything about Edinburgh University knew that this was utterly preposterous and that the Edinburgh University had always exacted an extremely high standard of its graduates. He might just as well have charged the University of London.

Mr. BROWN said that he made no charge or insinuation: he simply asked for a committee to consider how this discrepancy had arisen.

The PRESIDENT said that although there might be no charge in the motion Mr. Brown made a charge in the course of his speech.

Dr. MCVAIL said that as the seconder of the motion was a member of the Senate of the University of London he might cite the figures of the University. In the case of the M.B. examination of the University of London there were, according to this table, 66 rejections and 87 passes; of the M.D. examination 27 rejections and 39 passes; of the B.S. examination 10 rejections and 29 passes; and of the M.S. examination four rejections and four passes. Indeed, if one were to go through the table one would find a mass of contradictory results. The University of Dublin had 30 rejections and 94 passes and the Royal Colleges in Ireland had 107 rejections and 67 passes. At the last meeting of the Council he proposed that the whole of these tables should be referred to the Examination Committee, but it was preposterous and ridiculous to single out these two bodies and to cast aspersions upon the University of Edinburgh which was the greatest medical school in the world. He moved as an amendment that all the tables be referred to the Examination Committee.

Dr. LEECH said that he opposed the motion of Mr. Brown. If Mr. Brown had taken the trouble to go back a few years he would have seen that there was no discrepancy to complain about. Everyone who knew anything about examinations was aware that at times there were a large number of men who came up suddenly who ought to be rejected and the figures which Mr. Brown had quoted were purely accidental.

Dr. ATTHILL said that a point to be considered was that the same men might be rejected two or three times in the course of a single year.

Sir JOHN BATTY TUKE said it was altogether out of the question to make the proposed reference either to a special committee or to the Examination Committee. He protested against this firebrand being thrown into the midst of them. Why should Mr. Brown take up the case of the Victoria University? Was not there the Conjoint Board in England with 302 rejections and 489 passes, the Conjoint Board in Scotland with 237 rejections and 199 passes, the Conjoint Board in Ireland with 107 rejections and 67 passes, and many other cases he might have cited?

Dr. MACALISTER said that he happened to be one of the examiners in Medicine at the Victoria University and he assured Mr. Brown that there were good reasons in every case for the rejection—reasons which Mr. Brown himself would have appreciated if he had been an examiner. He was convinced that while on the one hand no candidate was unfairly rejected on the other no candidate was unfairly passed.

The PRESIDENT said that as the representative of the University of Edinburgh he could not allow Mr. Brown's remark to pass unnoticed. Mr. Brown was entirely in error if he thought that the University of Edinburgh attracted students to its walls by offering them the boon of an easy examination. No deeper error ever entered the mind of any man. As to the examination of last year he might say that it was matter of common remark and common knowledge at the University of Edinburgh that they had an extremely good set of men, and if Mr. Brown wished to know what was the standard of examination in the University he would refer him to the reports of the last inspection, which he would find in the minutes of the Council.

Sir PHILIP SMYLY suggested that Mr. Brown should withdraw his motion.

Sir DYCE DUCKWORTH said that the figures spoke for themselves and it was out of the question to refer them to his committee. He therefore begged to move the previous question.

Dr. PETTIGREW seconded this motion.

On a vote being taken the previous question was carried by 21 to five votes and the Council proceeded to the next business.

The Fellowship of the Faculty of Physicians and Surgeons of Glasgow.

Mr. HORSLEY had on the programme of business the following notice of motion, viz.:—

> That the action of the President in ruling out of order the following notice of motion of the last session: "Notice of motion by Mr. Horsley: 'To draw attention to a memorial furnished by certain Fellows of the Faculty of Physicians and Surgeons of Glasgow addressed to the Council respecting the insufficiency of the examination for the Fellowship of the Faculty and to move a resolution thereon,'" on the ground that the matter did not come within the purview of the Council, was in contravention of the Medical Act, 1858.

The PRESIDENT said that before Mr. Horsley went into this matter he desired to call attention to one or two inaccuracies in this notice of motion. Mr. Horsley had evidently been misinformed in regard to this business. No memorial addressed to this Council had been received from any Fellow of the Faculty of Glasgow. What did reach the Council was a letter from a gentleman (Dr. Hugh Woods) who was the secretary of a society called the London and Counties Medical Protection Society, Limited, and Dr. Woods enclosed with his letter a letter which was signed by two gentlemen—Robert Thomas Kent and James Whitson—but the peculiarity about the letter signed by these two gentlemen was that it did not show to whom it was addressed. This letter together with Dr. Woods's letter was sent to him (Sir William Turner) in the month of May by the Registrar and he (Sir William Turner) minuted the following: "The Council does not visit and inspect the examinations for the Fellowship of the Glasgow Faculty and has no authority over the examinations for qualifications other than those which primarily admit to the Register. Dr. Woods might be written to to this effect and told that the matter is one for the consideration of the Faculty itself." The Executive Committee met in a few days and the committee was of the same mind as himself and an answer was sent to Dr. Woods, but not to any member of the Faculty. He would state further that no letter had been received from Dr. Woods since this letter of June 6th was sent to him and he understood from the Registrar that no letter had been received from any Fellow of the Glasgow Faculty. He would also say that the motion as printed in the notice now on the programme was not the motion which he had ruled out of order.

Dr. HECTOR CAMERON said that subsequently to the first appearance of the motion its terms on his suggestion had been somewhat modified by Mr. Horsley and apparently the motion which now appeared on the programme was the original motion.

The PRESIDENT said that the motion which he ruled out of order was in these terms—viz., "To draw attention to a memorial furnished by two Fellows of the Faculty of Physicians and Surgeons of Glasgow addressed to the Council alleging the insufficiency of the examination for the Fellowship of the Faculty and to move a resolution thereon."

Mr. HORSLEY said that that was perfectly true and he would alter his present notice of motion accordingly. The ruling of the President was to the effect that the terms of his motion did not come within the purview of the Council and he interpreted that to mean that the Council had nothing to do with the supervision of the higher examinations of the bodies. Now the Medical Acts made no distinction whatever between examinations which primarily admit to the Register and examinations which were for supplemental qualifications in medicine, surgery, and midwifery. The Act of 1858 said it should be the duty of the Council to regulate certain examinations and those examinations were given in Schedule A of the Act and in No. 6 of that schedule was the Fellowship of the Glasgow Faculty. He submitted that if they were to accept this ruling without protest they would be cutting themselves off from a statutory right and duty—a duty which they owed not only to the profession but also to the public. It manifestly was the duty of the Council to inspect these higher examinations and if they had failed to do so in the past then to that extent they had failed in their duty.

Dr. BRUCE seconded the motion.

The PRESIDENT insisted that he had followed strictly the Act of Parliament and the practice of the Council. He would ask the attention of the Council to Section 30 of the Medical Act of 1858 which said: "Every person registered under this Act who may have obtained a higher degree or any qualification other than the qualification in respect of which he may have been registered shall be entitled to have such higher degree or additional qualification inserted in the Register in substitution for, or in addition to, the qualification previously registered on payment of such fee as the Council may appoint." The position of the matter was this: a person passed a qualifying examination; that qualifying examination was one which the Council had a right to visit and inspect, to satisfy itself that the qualifying examination was "such as to secure the possession by persons obtaining such qualification of the requisite knowledge and skill for the efficient practice of their profession." The person passing the qualifying examination was registered. He then went and presented himself for a Fellowship examination and obtained a Fellowship. Or it might be he was selected for a Fellowship without examination, for some of the bodies did not require any examination whatsoever. He came to the office of the Council and presented his diploma and the Registrar had no right to refuse to register that diploma. There was but one interpretation to be put upon this memorial which reached them through Dr. Woods and that was that it was entirely incompetent for that Council to deal with that subject matter and that if a remedy was required it lay with the faculty itself and not with that body.

Mr. BROWN argued that under Section 18 of the Act of 1858 the Council were entitled to require information as to the course of study, &c., for the higher examinations.

Sir CHRISTOPHER NIXON submitted that the supervision of these examinations was more than the Council could undertake.

Mr. TEALE said that in his opinion they were simply wasting time in discussing the question.

Mr. HORSLEY submitted that the ruling of the President

brought Section 30 of the Act into contradiction with Section 18.

After further debate the matter was brought to an issue by Dr. MCVAIL, seconded by Dr. HERON WATSON, moving the previous question. This motion was carried by 23 to four votes, three members abstaining from voting.

Inspection of Documents.

The Council proceeded to receive a report from the Executive Committee arising out of the following resolution adopted by the Council on Dec. 1st, 1898:—

That in view of the fact that the operation of the Standing Orders as to the inspection of documents passed by the Council on May 31st, 1898, is not altogether satisfactory, the Executive Committee be instructed to consider and to report to the Council at the next session what arrangements can best be made to facilitate the examination by members of the Council of all documents which are the property of the Council, subject to leave being obtained for such examination and to the legal rights of the Council in regard to such documents as also to their proper safeguard.

The report is to the effect that the Executive Committee at its meeting on Feb. 27th, 1899, adopted the following resolution:—

That it be a recommendation to the Council in regard to the inspection of documents that the following be substituted for the present Standing Order XXIII.: "That all documents of the Medical Council, when not required for use by its legal advisers, be available for inspection by any member of the Council on the following conditions: (1) that a notice in writing of three clear days be given to the Registrar; (2) that the subject of the documents needed for inspection be stated; (3) that the Registrar be held responsible for the safe custody of all documents; (4) that it be an instruction to the Registrar to have the documents so arranged with respect to chronological order and otherwise as to facilitate their inspection; (5) that no documents be removed from the premises of the Council; (6) that all such documents and the information therefrom derived be regarded as strictly confidential."

On the motion of Dr. MACALISTER, seconded by Mr. BRYANT, this report was received and entered on the minutes.

Sir DYCE DUCKWORTH moved that the Standing Order just proposed be adopted.

Mr. BRYANT seconded the motion.

Dr. MACALISTER pointed out that the recommendations of the Executive Committee did not quite carry out the last session's view of that committee that documents might be inspected "subject to leave being obtained for such examination and to the legal rights of the Council in regard to such documents, as also to their proper safeguard." He therefore thought that the introductory part of the proposed Standing Order should be so altered as to give expression to the view contained in the resolution of last session. He moved accordingly.

Dr. GLOVER, as a member of the Executive Committee, said he preferred the Standing Order in the form now presented to the Council because it assumed the right of every member to see documents belonging to the Council.

Dr. MACALISTER objected that the resolution of last session was not given effect to in the proposed new Standing Order.

Dr. GLOVER: I do not see that.

Sir CHRISTOPHER NIXON: I quite agree with Dr. Glover that this only states that each member of the Council has a right to inspect the documents belonging to the Council.

The PRESIDENT: That is just the question. We are advised that the right does not lie with the individual but with the Council.

Dr. MCVAIL said that the Council in this matter were going outside the procedure of every public body in the country and he should oppose this proposed Standing Order as far as possible. His idea was that every member of Council was entitled to see every document belonging to the Council that related to the business of the Council, but at the will of the body as expressed by vote. He could not see why members should, at their own sweet will, be allowed to burrow amongst the old documents, at the same time making the Registrar responsible not only for anything they did but for all those documents they might handle. It was ridiculous to suppose that the Registrar could be responsible in such circumstances. He held that this Standing Order was utterly absurd and altogether an undesirable one. If adopted it would lead to confusion and injury to, and loss of, documents.

Mr. HORSLEY said he did not see why Dr. McVail should compare him to a rabbit. It was no question of burrowing nor any question of rummaging, because notice had to be given as to what documents were required. Last session the Council had found that the old Standing Order was practically unworkable and yet Dr. McVail now asked them to go back to the old system. At the time of the original dispute he had asked directors of numerous boards as to the practice and he had found that there was no parallel to the system proposed to be set up by the General Medical Council.

On the suggestion of Sir RICHARD THORNE who wished to propose an amendment the Council agreed to proceed with the recommendations *seriatim*, the respective recommendations being taken as moved by Sir DYCE DUCKWORTH and seconded by Mr. BRYANT. The suggestion of Dr. MACALISTER in respect to the first or introductory paragraph was accepted and it was decided that the reading should be: "That the following be the condition on which leave is granted to members of the Council to inspect the documents of the Council when not required for use by its legal advisers."

On recommendation 1 Sir RICHARD THORNE moved to add that when the Council was sitting notice in writing should not be necessary. Some discussion ensued and ultimately it was agreed that condition No. 1 should read as follows:—

"That a notice in writing of three clear days be given to the Registrar, except when the Council is in session, when special leave may be granted."

Recommendations Nos. (2) and (3) were adopted without amendment. Recommendation (4) was amended by the addition, at the end, of the words "during office hours." Recommendation 5 was, on the suggestion of Dr. MACALISTER, substituted by the following: "That documents under inspection be not removed from the premises of the Council." Some discussion took place in regard to the phrase "strictly confidential" in Recommendation (6), but it was explained that this phrase meant no more than privacy until such time as any matter came up in open Council and became part of the public procedure of the Council.

Standing Order No. 23 accordingly will read as follows:—

That the following be the conditions on which leave is granted to members of the Council to inspect the documents of the Council when not required for use by its legal advisers:—1. That a notice in writing of three clear days be given to the Registrar, except when the Council is in session, when special leave may be granted. 2. That the subject of the documents needed for inspection be stated. 3. That the Registrar be held responsible for the safe custody of all documents. 4. That it be an instruction to the Registrar to have the documents so arranged with regard to chronological order and otherwise as to facilitate their inspection during office hours. 5. That documents under inspection be not removed from the premises of the Council. 6. That all such documents and the information therefrom derived be regarded as strictly confidential.

The Council adjourned.

WEDNESDAY, MAY 31ST.

The Council met again to-day, Sir WILLIAM TURNER being in the chair, and resumed the work of the session.

The Direct Representation: Proposed Increase.

The REGISTRAR (Mr. Allen) intimated that the following communication had been referred to the General Council by the Executive Committee, viz.:—

British Medical Association, General Secretary's Office,
429, Strand, London, W.C., April 21st, 1899.

SIR,—I am directed by the Council of the British Medical Association to forward to you copies of resolutions passed at their last meeting held on Wednesday, the 12th day of April.

I am, Sir, your obedient servant,
FRANCIS FOWKE, General Secretary.

The Registrar of the General Medical Council.

"Resolved: That this Council feels that the time has now come when the general practitioners in the United Kingdom are entitled to demand a much larger share of direct representation on the General Medical Council.

"Resolved: That a copy of the foregoing resolution be sent to the General Medical Council."

Mr. BROWN moved:

That in the opinion of the Council the time has come when it is expedient to confer on the registered medical practitioners resident in England and Wales the power of returning an additional Member to the General Council, as provided for in the Medical Act of 1886.

In the first place, Mr. Brown thanked the President and the Executive Committee for the early place which his motion had received on the programme of business and which, he said, gave an ample opportunity for the discussion of the subject-matter. The Council would remember that on previous occasions he had put a similar motion on the paper, but the exigencies of the business of the Council had been such that he had been unable to bring it forward, and he might say that the

medical profession confidently expected that the Council would consider this question and declare its opinion upon it. Clause 10 of the Medical Act of 1886 set forth that the General Council might at any time represent certain matters to the Privy Council, and one was that it was expedient to confer upon the registered medical practitioners resident in any part of the United Kingdom the power of returning an additional representative to the General Council. When he first gave notice of his motion two years ago he included Scotland and Ireland, but it was represented to him that it might be inexpedient to take the three countries together as the conditions differed somewhat in each case. Therefore he confined himself on the present occasion to the country with which he was most familiar. At the same time he assured the Scottish and Irish members of his hearty support if they brought forward a similar motion. It was obvious that the three representatives were given to England because of its numerical superiority over Scotland and Ireland, which were each given one representative, and if they looked at the figures they would find that since the Act of 1886 was passed there had been a great increase in the numerical strength of the practitioners resident in England. The general practitioners might make this demand as a right, but he did not put it forward in that way. He had had nothing to do with the framing of the resolution of the Council of the British Medical Association and, in fact, he did not approve its phraseology. He put this matter forward on the ground of expediency. Since the passing of the Act in 1886 the practitioners resident in England and Wales had increased from 16,978 to 21,614. In Ireland and in Scotland they had, roughly speaking, about 3000 practitioners in each country. On these figures he thought that there was a clear case for going to the Privy Council and asking for an additional direct representative for England and Wales. In framing the Act the Legislature had the prescience to see that occasion might arise for additional representation and had made provision for it, and he submitted that it was the duty of the General Medical Council to make use of the provision offered. He asked the Council to do the thing gracefully. Let them not have their hands forced. The profession had come to that Council as the proper channel and he thought they might take it that if the Council refused this claim the profession would have to look to other means. A similar resolution to this had not been moved since 1895 when 20 members voted against it. Of these members 14 were now on the Council and he appealed to them to consider how the circumstances of the case had changed and how strong was the claim for this additional representation.

Mr. HORSLEY formally seconded the motion, reserving his right to speak later in the debate.

The PRESIDENT asked whether there was any member who had any observations to make on the motion, and for a moment or two there was no response.

Dr. GLOVER rose and said that if no one else was disposed to speak he would offer a few observations. He was afraid the Council had never taken very kindly to this subject, but he ventured to think that as the years had gone on the prejudice against the direct representation had diminished and he felt sure that in the future it would continue to diminish. It was impossible to deny that the Direct Representatives had contributed a fair share of work and suggestion to the Council and on the occasion of the retirement of Sir Walter Foster and Mr. Wheelhouse the Council itself had passed a resolution expressing a sense of the loss it was about to sustain and its appreciation of the high services rendered by these gentlemen. In connexion with this subject a point to be remembered was that it was the profession who supplied the funds of the Council. He submitted that it would be an act of wisdom, of liberality, and of justice to concede to the profession the proposal now put forward. It must long have been apparent to the Council that the rank and file of the profession were immensely interested in its proceedings, not merely in regard to questions of education but in regard to discipline and judgment. Surely, it was fitting that a few of them should be here to help the Council in deliberating upon the conduct of medical men and in other matters, such, for instance, as death certification and legislation for midwives.

Sir WILLIAM GAIRDNER said there appeared to be an indisposition on the part of those Members who were not on the side of Mr. Brown to speak. He himself was unwilling to speak in any sense in opposition to the representation of the general practitioners because he was favourable to direct representation and he was glad at this Council to have the assistance of the Direct Representatives. But there were reasons why they should not vote for this motion. He dissented altogether from the view that the representation should bear a certain definite proportion to the number of the electors. He held to the old principle that each considerable institution and interest should have a voice and he would point out that a single voice was enough to present the case of an institution or interest. What was really wanted was that the general practitioners of the three divisions of the kingdom should have a living voice to represent them and he said that the *status quo* was fairly satisfactory and that no case had been made out for altering it. There were a large number of medical men who did not go to the British Medical Association and pass resolutions of this kind and who thought that the election of Direct Representatives was simply a disturbing element in their every-day work which they would rather be without. Of course, there were always a lot of men who were, in general terms, malcontents, who were "agin the Government," as they said in Ireland, and who were always disposed to get up a row or an agitation on some subject. When a man got a few friends around him he was nominated for this representation and all the machinery of a contested election was involved in consequence. Altogether he offered a simple negative to this motion.

Mr. TEALE confessed that at one time he was opposed to direct representation. In the early days of the Council the profession took very little interest in its proceedings. He admitted that this state of things no longer existed. At the same time he was not going to vote for this motion because he did not consider the present moment opportune for the addition of a Direct Representative.

Dr. LITTLE opposed the motion on the ground that interests were at the present moment very well balanced. The speeches and the action of Mr. Brown gave to him, he said, the idea that Mr. Brown considered that the public of Great Britain and Ireland were a body created for the special benefit of the general practitioners and such a view of the situation he could not entertain for one moment.

Sir RICHARD THORNE said he had looked into the figures of the last three elections of Direct Representatives and he found that in Ireland 75 per cent. of the practitioners sent in papers, in Scotland 68 per cent., and in England only 59 per cent. Therefore England was the most backward in this matter of the three divisions of the kingdom.

Mr. CARTER suggested that this question might safely be deferred until the approach of another election.

Sir WILLIAM THOMSON said it was of no use going into percentages. This was a matter which had been brought before them by a body which, it would be admitted, largely represented the profession and it must be settled upon the broad principle of whether or not it was just and right. He knew that in Ireland it was felt that on this Council the general practitioners were not sufficiently represented. There were two ways of dealing with the matter—either the whole constituency of the universities and corporations might have the power of returning the representative or there might be an increase in the number of Direct Representatives. He supported the motion because he thought it contained a moderate and a just proposal and one which if passed would be a useful precedent for Ireland.

Sir CHRISTOPHER NIXON said he did not see how the general practitioners could be better represented than by the present constitution of the Council. It was a curious thing, he further said, that when the general practitioners had the opportunity of selecting representatives they did not always select one of their own body.

Mr. TICHBORNE intimated that he would vote against the the motion.

Dr. PETTIGREW opposed the motion, saying that it would only play into the hands of those who desired to make the medical profession a mere trade union.

Dr. LEECH said that he considered that this was not the time to deal with this question.

Dr. MCVAIL said he would vote for the motion because he thought the additional member would be of some use and because it might tend to remove the feeling in the profession that the Council was inimical to the profession. He would like, however, to point out to Mr. Brown that the Medical Act provided that 16 of the 30 members of the Council might not be members of the medical profession at all, for neither the Crown nor the universities were compelled to return members of the medical profession.

Mr. BROWN, replying to the debate, said that if the motion were passed action upon it could be stayed until the approach of an election of Direct Representatives and thus all inconvenience would be avoided. As to playing into the hands of those who desired to make the medical profession a trades union he repudiated any such intention and he denied that the motion had any such tendency. His sole object was to guard the best interests of the profession which he felt certain were identical with those of the general public. As to this being the work of habitual malcontents he denied it. It had been no affair of his to get up agitation. He put this motion forward upon its merits and he asked the Council to deal with it upon its merits.

The vote was then taken when 7 members voted for the motion and 21 voted against it. One member refrained from voting and one member was absent. The motion was accordingly rejected.

Companies Act Amendment.

The Council received the following report from their Committee on the Companies Act Amendment Bill.

In the report which was submitted by this Committee to the General Medical Council in November last it was mentioned that the Lord Chancellor had been approached upon the subject and that there was reason to hope that his favourable consideration of the Memorial submitted to him had been secured.

Since that time two members of your Committee and Mr. Muir Mackenzie have had an interview with the Lord Chancellor, which appears to have led to some modification of the views which he had previously entertained, and in accordance with a suggestion then thrown out the standing counsel to the General Medical Council, Mr. Muir Mackenzie, submitted a draft clause which it was thought would secure the necessary addition to the Medical Acts and the Dentists Act.

The idea of endeavouring to obtain a clause in a forthcoming Companies Amendment Bill has been abandoned and although the Lord Chancellor did not adopt the draft submitted to him a short separate Bill was by his direction prepared by the Government draughtsman and has been read for the first time in the House of Lords as a Government measure.

The intervention of the Whitsuntide recess has rendered it impossible to obtain any very recent information as to the prospects of the further progress of the Bill, which is to the following effect:—

A Bill intituled an Act to prohibit the profession or business of a physician, surgeon, dentist, or midwife, being carried on by a company.

Be it enacted by the Queen's most excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled and by the authority of the same, as follows:—

1. It shall be unlawful for a company under the Companies Acts, 1862 to 1898, to carry on the profession or business of a physician, surgeon, dentist, or midwife, and if any company contravenes this enactment it shall be liable on summary conviction to a fine not exceeding five pounds for every day during which the contravention happens.

2. This Act may be cited as the Companies (Medical Profession) Act, 1899.

Your Committee think that this Bill, prepared under the directions of the Lord Chancellor, would, if passed into law, amply meet all the evils complained of, provided that the words "medical practitioner" be inserted after the words "physician, surgeon." At the same time that this Bill was introduced another and separate Bill dealing with the case of the pharmaceutical chemists was also read.

The Council of the Pharmaceutical Society of Great Britain, which had also been invited to offer suggestions to the Lord Chancellor and did so at some length, are dissatisfied with the proposed Pharmacy Bill and this appears to have led to some delay in the further progress of the Medical Bill. It is to be remarked that the two Bills were drawn by the direction of the Lord Chancellor after due consideration of the data placed before him and may therefore be taken to embody such provisions as appeared to him to be practicable and to be applicable to the two cases.

The Committee have had remitted to them by the President a communication received from the Pharmaceutical Society of Ireland addressed to the Council. In this communication the Pharmaceutical Society, by special resolution of its Council, notifies the General Medical Council that it approves of the general principle involved in the Lord Chancellor's Medical Bill and invites the General Medical Council to use its influence to have pharmacists and druggists included in the Companies (Medical Profession) Bill. Your Committee would propose that a reply should be sent by the General Council to the Pharmaceutical Society of Ireland stating that the General Medical Council feels that inasmuch as its duties are solely in relation to the Medical Acts and the Dentists Acts, it is beyond its province to deal with the invitation of the society as requested.

Your Committee would suggest that the Lord Chancellor be petitioned by this Council to proceed with the Medical Bill at as early a date as may be convenient to him. Information has reached your Committee that the process of company formation is in active progress. Within the last few weeks and even since the publication of the Lord Chancellor's Bill a fresh and striking example of a company formed for the purpose of conducting medical and dental practice has come to the knowledge of the Committee.

Mr. TOMES, in moving that this report be received and entered on the minutes, said that the Lord Chancellor had produced a Bill which was absolutely stronger and better than they had asked for. A difficulty had occurred to the Committee in regard to the non-use of the term "medical practitioner," inasmuch as the Committee thought the term "physician and surgeon" would be too restricted. The Lord Chancellor had been communicated with as to the adoption of the more general term, and he (Mr. Tomes) did not think that there would be any difficulty in getting the term introduced into the Bill. With regard to the Pharmaceutical Society's application for protection these chemists were subject in certain respects to the same kind of injury that the members of the medical and dental professions were. They, however, had their opportunity of also appearing before the Lord Chancellor, and if the Bill on their behalf was not similar to that for the medical and dental professions it could only be assumed that the cases were different and that that of the chemists was the weaker. The chemists were dissatisfied with what the Lord Chancellor offered them and that really was the reason for the delay that had taken place in connexion with the Medical Profession Bill.

Mr. HORSLEY seconded the motion, which was agreed to.

Mr. TOMES then moved—

That the President be requested to address to the Lord Chancellor a communication to the following effect: "The General Medical Council desire to express its thanks to the Lord Chancellor for the action which he has taken with regard to the Companies (Medical Profession) Bill. They consider that the addition of the general term 'medical practitioner' in Clause 1 is very desirable, and that with this addition the Bill would amply guard against the evils dealt with by it. They hope that in view of the fact that the incorporation of companies dealt with in the Bill, of which they append two fresh examples, is still actively going on the Lord Chancellor may see fit to proceed with the Bill at an early date during the present session."

Dr. CHURCH seconded the motion, which was unanimously agreed to.

An Official Appointment.

On the motion of Dr. MACALISTER Mr. Allen, the General Registrar of the Council, was formally re-appointed, the appointment to continue until the last day of the May session of the year 1900. In the course of some remarks that were made on the motion it came about that Mr. Allen's previous appointment for one year had expired on May 28th and therefore as the Council had really been without a regularly appointed registrar for two days it was thought better that he should hold office on his formal re-appointment until the last day of the May session of next year.

Unqualified Dispensers.

The next business had reference to unqualified dispensers. The order paper presented it as follows:—

Communications from the Privy Council Office in regard to the system of employing unqualified persons as dispensers, referred to the General Council by the Executive Committee by the following resolution:—

"That the Committee recommend the subject to the consideration of the General Council, but in the meantime express to the Privy Council that whilst they fear that occasional accidents may arise from the employment by qualified medical practitioners of careless or incompetent dispensers the cases, in their opinion, are very rare, and it appears to the Committee that probably the best protection is afforded to the public by the responsibility of the practitioner for the acts or defaults of the servants whom he employs." (Executive Committee Minutes, February 27th, 1899, Clause 10.)

(*a*) LETTER FROM THE PRIVY COUNCIL.

Privy Council Office, Jan. 24th, 1899.

SIR,—I am directed by the Lord President of the Council to transmit to you, to be laid before the General Medical Council for their information, the accompanying copy of a letter received from Mr. Oglesby, of Barnsley, directing attention to the danger to the public arising from the employment by medical practitioners of unqualified dispensers.

I am, Sir, your obedient servant,

The Registrar of the General Medical Council. A. W. FITZROY.

(*b*) ENCLOSURE REFERRED TO.

Arthur Oglesby, Analytical Chemist,
21, Cheapside, Barnsley, Jan. 23rd, 1899.

To Her Majesty's Privy Council.

YOUR LORDSHIPS,—I beg to draw your attention to the recent fatality at Heaton Norris in which a doctor's dispenser—admittedly an incompetent man—was so thoroughly ignorant of doses as to cause the death of a person by giving such a quantity of *morphia* as no sane man (other than an ignorant) would have dispensed.

And I would respectfully submit to your lordships' notice that the public run a serious risk by the careless dispensing that is done in thousands of doctors' surgeries throughout England.

In this town (Barnsley) out of, say, 25 doctors all but *one* have their medicine dispensed at their own surgeries, and I think that not *one single qualified dispenser* is engaged by these men. At the two hospitals in this town unqualified dispensers have the posts for cheapness.

The fact that even doctors themselves have a very vague knowledge of dispensing and are not *qualified dispensers*, also that they are able so easily to cover up any mistakes their dispensers may make; that there are plenty of *qualified dispensing chemists*—taught the whole art of dispensing and examined by the Pharmaceutical Society—under your Lordship's jurisdiction—to do this very work, and thus well qualified to do it, certainly makes it a crying evil that while, for the safety of the public, the chemist—who is a *qualified* dispenser—is hedged round

with restrictions as to the dispensing of *poisons*, &c., the prescriptions of a medical man, possibly containing the most powerful toxic agents, are generally dispensed by his groom or some equally incompetent person.

And I submit to your lordships that no medical man ought to be free to delegate the dispensing of his prescriptions to any other than qualified and therefore fit persons.

Whether your lordships will think, after consideration, that the doctor *himself* should not be allowed to do his own dispensing—being so easily able to cover up any mistake by a death certificate—I leave to your lordships' judgment.

I beg to remain your lordships' obedient servant,
(Signed) ARTHUR OGLESBY.

(*c*) FURTHER LETTER FROM THE PRIVY COUNCIL.

"Privy Council Office, London, S.W., Jan. 27th, 1899.

SIR,—Referring to my letter of the 24th instant, on the subject of employment by medical practitioners of unqualified dispensers I am directed by the Lord President of the Council to transmit to you, to be laid before the General Medical Council, the accompanying copy of a communication on the same subject from Mr. A. Cooper, of South Kensington.

I am, Sir, your obedient servant,
The Registrar of the General Medical Council. A. W. FITZROY.

(*d*) ENCLOSURE REFERRED TO.

Cooper & Co., Pharmaceutical Chemists,
80, Gloucester-road, South Kensington, S.W.,
Jan. 25th, 1899.

To the Clerk of the Privy Council.

SIR,—The recent lamentable case of poisoning at Heaton Norris, near Stockport, brings vividly to mind the unsatisfactory manner in which dispensing is conducted in surgeries by unqualified assistants. Much has been done in recent years to protect the public by means of rigorously enforcing the provisions of the Pharmacy Act of 1868 on registered chemists, but it appears to me that the public require more protection—viz., that all dispensers of poisons should be qualified chemists or doctors.

No Act has been passed with a view to protect the public from incapable dispensers in private surgeries and the seriousness of the case is at once apparent when we learn that considerably more than half of the dispensing in this country is done by unqualified dispensers in surgeries.

For the safety of the public I would respectfully suggest that the existing conditions under which poisons are dispensed in surgeries should receive immediate and serious attention.

Yours faithfully,
(Signed) ALBERT COOPER,
Fellow of the Chemical Society and Member of the Pharmaceutical Society.

Mr. BROWN did not think this matter should be disposed of without due consideration as it would be if they dealt with it right off. He moved that a special committee be appointed to consider the communications and to report.

Dr. BRUCE seconded the proposal.

The motion was agreed to, and Mr. Brown, Dr. Bruce, Mr. Teale, and Dr. Leech were appointed to be the committee.

Fraudulent Personation.

The next business was the consideration of a report by the Executive Committee on the following reference from the General Council sitting *in camerâ* on Nov. 30th, 1898:

That the Executive Committee be instructed to report upon means to secure the identification of registered medical and dental practitioners and to prevent fraudulent personation of such practitioners.

The committee recommend the adoption of the following Standing Order:

"That no application for the restoration to the Medical or Dentists Register of the names of persons who have been removed under Section 14 of the Medical Act (1858) or Section 12 of the Dentists Act (1878) shall be entertained unless it be accompanied by a statutory declaration made by the applicant setting forth the facts of the case and stating that he is the person originally registered, and by a certificate from a clergyman, a magistrates, or a registered practitioner as to his identity" (Executive Committee Minutes, Feb. 27th, 1899, Clause 14).

After this report had been received and entered on the minutes the adoption of the recommendation contained in it was moved by Mr. BRYANT and seconded by Mr. BRUDENELL CARTER.

Mr. HORSLEY did not think the Committee's recommendation adequate and moved for the appointment of a special committee of inquiry.

Dr. BRUCE seconded and Dr. ATTHILL supported him in this action, and Mr. BRYANT and Mr. CARTER intimated that they had no objection to the withdrawal of the Committee's recommendation.

Thereupon it was resolved:—

That a special committee be appointed to report during the present session upon the best means to secure the identification of a person applying to be admitted to the Medical or Dental Register and to prevent fraudulent personation either on first being admitted to the Register or on re-registration.

Mr. HORSLEY did not think this sufficient.

The Council, at the suggestion of the President, accordingly agreed to add:—

That the whole subject of granting certificates of registration be also referred to the same committee for consideration and report.

On Mr. HORSLEY'S motion it was decided that the committee should consist of the following members: Dr. Bruce, Sir Richard Thorne, Sir John Batty Tuke, Sir Philip C. Smyly, Mr. Tomes, Sir William Thomson and Mr. Horsley.

Midwifery Certificates.

The Council proceeded to receive a report from the Executive Committee arising out of the resolutions adopted by the General Council on Dec. 1st, 1898—namely:

That the memorials on the subject of illegal certificates of proficiency in departments of medicine, surgery, or midwifery, received (1) from the Corporate and Medical Reform Association, Limited and (2) from 237 registered practitioners and laymen be laid on the table.

That the foregoing memorials be referred to the Executive Committee for consideration and report.

The report by the Executive Committee was in the following terms:—

The Committee recommend the Council to adopt the following resolution: "That, as regards the issue of certificates in midwifery referred to in the memorials, the Council is of opinion that as a Midwives Bill is now before Parliament it should at present refrain from taking any action. As regards the certificates granted to spectacle-makers the Council exercises no jurisdiction over such opticians, but will be prepared to consider any properly substantiated charge of improper conduct made against a registered medical practitioner with reference to this subject."

Dr. MACALISTER mentioned that other three bundles of memorials to the same effect had been received since December last.

Mr. BROWN, who thought members should have an opportunity of reading these supplementary memorials, moved that the discussion of the subject be deferred till a later day in the session.

Mr. HORSLEY seconded the motion, which was agreed to.

In answer to an inquiry by Dr. GLOVER as to how members could see those supplementary memorials, the PRESIDENT said that they had been laid on the table, and Mr. BRYANT remarked that they had some weeks ago been distributed to the members of the Council.

Reciprocity of Medical Practice.

The Council then dealt with communications from the Privy Council Office in regard to the practice of Italian medical practitioners in this country, and the question of reciprocity referred to the General Council by the Executive Committee in the following resolution:

That these communications be referred to the meeting of the Council in May next. (2) That in the meantime the Registrar be directed to inform the Privy Council that the Committee would welcome such a recognition of a right by English practitioners to practise in Italy as would enable Her Majesty in Council, under the provisions of Section XVII. of the Medical Act, 1886, to extend similar privileges to Italian practitioners in this country. And that with regard to the other questions raised in the correspondence, the Executive Committee, would refer the Privy Council to a letter of date Feb. 24th, 1898, addressed to Sir Charles Lennox Peel, containing a reply by that Committee to certain questions received through the Privy Council from the German Ambassador as regards practice by foreigners in this country.

The communications were as follows:—

(*a*) LETTER FROM THE PRIVY COUNCIL.

The Clerk of the Council,
Privy Council Office, London, S.W.
Feb. 13th, 1899.

SIR,—I am directed by the Lord President of the Council to advert to your letter of the 25th August, 1897, on the subject of formalities necessary in this country for the recognition of degrees obtained at Italian Universities by Italian subjects, &c., the contents of which were communicated to the Foreign Office on the 8th October, 1897, and I am to transmit to you the accompanying copy of a letter which has been received from that department transmitting a copy of a note from the Italian Ambassador at this Court asking whether Italian physicians can without a fresh diploma exercise their profession in this country, or at least on foreigners resident in Great Britain, and whether, if the answer to this question is in the negative, Her Majesty's Government would be willing to grant permission to Italian physicians to do so if the Italian Government were to engage to grant similar privileges to English physicians residing in Italy.

I am to request that you will move the General Medical Council to favour the Lord President with any observations they may desire to offer on Baron de Renzis's note.

I am, Sir, your obedient servant,
The Registrar of the General Medical Council. A. W. FITZROY.

(*b*) COMMUNICATION FROM THE FOREIGN OFFICE TO THE PRIVY COUNCIL OFFICE.

Foreign Office, Feb. 10th, 1899.

SIR,—I am directed by the Marquess of Salisbury to state to you that on the receipt of your letter of Oct. 8th, 1897, the Italian Ambassador was informed that the General Council of Medical Education were unable to supply further particulars beyond those already communicated to him with regard to the professions of physician and surgeon.

I enclose a copy of a note which has now been received from Baron de Renzis asking whether Italian physicians can without a fresh diploma exercise their profession in this country, or at least on foreigners resident in Great Britain, and whether, if the answer to this question is in the negative, Her Majesty's Government would be willing

to grant permission to Italian physicians to do so if the Italian Government were to engage to grant similar privileges to English physicians residing in Italy.

Lord Salisbury would be glad to learn what reply the Lord President of the Council would wish to be given to His Excellency.

I am, Sir, your most obedient humble servant,
The Clerk of the Council. (Signed) T. H. SANDERSON.

(c) DESPATCH FROM THE ITALIAN AMBASSADOR.

[TRANSLATION.]

Italian Embassy, London, Jan. 31st, 1899.

MY LORD,—This Embassy did not fail to communicate in due course to the King's Government the purport of the two notes from your lordship of May 3rd and Oct. 16th, 1897, relative to the recognition of Italian diplomas in England.

Returning to a part of the subject, I am now to request your lordship to be good enough to give me more special explanations as regards the admission of graduates in medicine of the Italian Universities to practise the medical profession in England.

As the Italian Government and the Italian medical profession are much interested to know exactly what are the laws, regulations, or customs which affect the subject, I venture again to invoke your lordship's assistance, and request you to be so good as to answer with the greatest possible precision the following queries:

1. Can Italian physicians in England, without being furnished with any fresh diploma, exercise their profession on anybody, or at any rate on the foreign colonies in this country only?

2. In the negative case would the Government of the Queen be willing to grant such permission to Italian physicians if the Government of the King were to engage on their side to grant similar privileges to English physicians residing in Italy?

I shall be all the more grateful to your lordship the more categorical the answers which your lordship may be able to give to these queries, and I have, &c.,
The Marquess of Salisbury, K.G., &c. (Signed) F. DE RENZIS.

Mr. BRYANT, seconded by Dr. MACALISTER, moved the approval of the Executive Committee's recommendation (2).

Dr. MCVAIL said he would like some information on this subject. If the Committee's proposal were carried their Registrar would be empowered to inform the Lord President of the Privy Council that it was the view of the Medical Council that if the Italian Government were willing to allow English practitioners to practise in Italy the Queen in Council should make an order empowering Italian practitioners to practise in any part of the United Kingdom or the British colonies. He supposed that privilege could not be confined to Italy. All the other countries of Europe might claim or desire to be placed on the same footing and if the privilege were conceded to Italy how could it be refused to France, Germany, Austria, and the other states of Europe? But what was more serious how could it be refused to the United States of America? That was a serious question. Was it the intention of the Council to say that they were to sit there year after year and endeavour gradually to raise the standard of education and yet that they were actually going on the suggestion of the Lord President of the Privy Council to agree that the Queen should make an order throwing open the door to Continental and American practitioners generally. If that door were opened the country would get overrun by foreign practitioners. Why should the Council compel Englishmen, Irishmen, and Scotchmen, to undergo examinations of a very high standard and yet agree to admit foreign practitioners without inquiring as to what kind of training they had had. If the Committee's recommendation meant that the door was to be thrown open in that wide way he certainly could not vote for it.

Mr. HORSLEY said he felt as strongly on this matter as Dr. McVail, and he believed that if the Committee's recommendation were adopted the medical profession of this country could be literally swamped by foreign practitioners. He contended that this was no matter of trades unionism. It was a matter of their carrying out their duty as respects professional education. To establish such reciprocal arrangements as the Committee suggested seemed to him to be absolutely impossible.

Dr. ATTHILL thought it had been lost sight of that this was a matter which had been brought up by English medical men in Italy. These gentlemen were excluded from practising, to their own detriment and to the detriment of our fellow-subjects who were travelling in that country.

Sir RICHARD THORNE said that the proposal now before the Council was really in the interests of medical practitioners practising in Italy. He believed that something was required in the direction of reciprocity inasmuch as there were thousands and thousands of English people travelling or resident in Italy who suffered bitterly because they could not get English medical advisers. If the privilege were accorded to English practitioners in Italy of going among persons of their own nationality it would be a matter of question whether Her Majesty's Government should not give the same right to Italian practitioners in this country.

Sir CHRISTOPHER NIXON said that if our countrymen wished to practise in Italy they could easily secure examination by some Italian institution and get degrees to enable them to practise. But it seemed to him a most extraordinary proposition to come to this General Medical Council and say that they should allow foreign practitioners generally to enter the United Kingdom, without any security whatever as to the standard of examination they had passed, in order to enable a small portion of the English medical profession to practise in Italy. He agreed that if the door was thrown open to Italy it must also be opened to all other states of Europe and also to the United States of America. He certainly would vote against the motion.

Dr. BRUCE said that they were only asking for corresponding rights as between two countries. In his opinion it would be hard indeed if the Council set their face against this proposal.

Mr. HORSLEY: How can limitations be introduced?

Dr. MCVAIL: There seems to me to be a legal question and we ought to have Mr. Muir Mackenzie's opinion on the matter.

Sir J. BATTY TUKE agreed.

Mr. BROWN said that from his own experience as a practitioner he knew that there were thousands of Italians in London who might take advantage of the medical services of a countryman of their own. He certainly should offer no objection to a proposition which limited practising of foreign medical men to countrymen of their own.

Sir DYCE DUCKWORTH said he believed that at the present moment there was only one Italian practitioner on the Medical Register. According to his information not more than two or three Italian medical men were concerned in the raising of this question in the Italian Parliament and he did not think anything could come of it. If, however, Italian medical men were to be registered in England he hoped they would come under the control of the General Medical Council.

Mr. TOMES was not prepared to say that he could support the Committee in their communication to the Privy Council exactly in the terms in which they had submitted it. He should like to see the matter further inquired into. He did not think the matter was a small one. It appeared to him that though apparently a small affair it was a very large one.

After some further discussion Dr. MCVAIL moved:

That it be remitted to Mr. Muir Mackenzie to advise the Council as to whether under Section 17 of the Medical Act of 1886 the privilege to foreign practitioners can be restricted to recognition to practise by them amongst their fellow countrymen only who may be resident in this country.

On a division 20 members voted for this proposal, which accordingly was carried.

The Council adjourned.

THURSDAY, JUNE 1ST.

The Council met again to-day and began the consideration of penal cases. Our report of the proceedings will be published in next week's issue of THE LANCET.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen having passed the necessary examinations and conformed to the by-laws and regulations, have been admitted Members of the College and have received their diplomas:

Arthur James Bowman Adams, St. Thomas's Hospital; Henry St. Arnaud Agate, St. Mary's Hospital; Cecil Edward Andrews, London Hospital; Henry Augustus Ahrens and Charles Fenwick Backhouse, King's College Hospital; Frederick Relland Baker, London Hospital; William Langworthy Baker, Guy's Hospital; Albert Stanley Barnes, Mason College, Queen's, and General Hospital, Birmingham; Joseph Sandert Barnes, Frank Bawtree, Hanway Richard Beale, and Arthur Cyril Bird, St. Thomas's Hospital; Harold Frederic Bassano and George Browse, Cambridge University and St. Bartholomew's Hospital; Charles Dudley Bishop, Charing-cross Hospital; Frederic Charles Borrow, Harold Burrows, George Gunning Campbell, and Edward Percy Court, St. Bartholomew's Hospital; William Daniel Chapman, Cambridge University and London Hospital; Edward William Clapham,

London Hospital; Charles Joseph Copp, Trinity Medical College and Toronto University and St. Thomas's Hospital; Franklin Cox, University College and Royal Infirmary, Bristol; Edward Henry Cragg and Harold Sugden Crapper, Guy's Hospital; John Bernard Davey and David Lawford Francis Davies, Middlesex Hospital; George Herbert Dominy, St. Thomas's Hospital; Ernest Blair Dowsett, King's College and Guy's Hospital; William Arthur Durance, Westminster Hospital; Robert Halstead Dixon and Augustus Lea Edwards, St. Mary's Hospital; David Richard Edwards and Robert John Ewart, University College and Royal Infirmary, Liverpool; William Howard Edwards and John William Ensor, Guy's Hospital; Herbert Devas Everington, St. Bartholomew's Hospital; Thomas Gerald Fenton, St. Thomas's Hospital; Ernest Faber Fook , Owens College and Royal Infirmary, Manchester; Percy Foster, Charing Cross Hospital; Francis Henry Foulds, St. Mungo's College, Glasgow, and Charing Cross and Westminster Hospitals; Arthur Horace Gadsden, St. Mary's Hospital; Percy Gardiner, Middlesex Hospital; Joseph Gatt, University of Malta; Herbert Bowly Gibbins, St. Bartholomew's Hospital; Allan Gordon Graham, St. Thomas's Hospital; Samuel Morris Green, University College and Royal Infirmary, Liverpool; Cyril John Wedemeyer Grindrod, St. George's Hospital; Rudolph Gruber, Vienna University and St. Bartholomew's Hospital; Charles Cowen Gurd, McGill College and General Hospital, Montreal, and St. Mary's Hospital; Albert Ernest Hamerton, Yorkshire College and General Infirmary, Leeds; Henry Arthur Clifton Harris, St. Thomas's Hospital; John Owen Harvey, Mason College, Queen's and General Hospitals, Birmingham; William Thomas Hillier, Harry Hipwell, and Albert William Dunning Hunt, Middlesex Hospital; Maynard Horne, Cambridge University and St. George's Hospital; Raymond John Horton-Smith, Cambridge University and St. Thomas's Hospital; James Bradley Hughes, Durham University, University College and Royal Infirmary, Liverpool; Jenkin Howells, Guy's Hospital; Charles Durban Ingle, University College and Royal Infirmary, Bristol; Frederic William James, University College Hospital; William Hugh Leonard and William Christopher Long, St. Bartholomew's Hospital; John Henry Lightfoot, St. Mary's Hospital; Lyonel John Lock, Trinity College, Dublin, and London Hospital; Arthur Daniel Lewis, John Tyley Montgomery McDougall, George Norman Meachen, and Arthur Alan Miller, Guy's Hospital; Michael Robert Maher, University College and Royal Infirmary, Liverpool; John Macleod Martin, McGill College and General Hospital, Montreal, and University College Hospital; Herbert Barford Minshull, Mason College, Queen's and General Hospitals, Birmingham; Robert Fletcher Moorshead, University College and Royal Infirmary, Bristol, and St. Bartholomew's Hospital; Frederick Charles Morgan, University College and Royal Infirmary, Bristol; William Robson Nichols, Trinity College and General Hospital, Toronto; Burton Alexander Nicol, Charing-cross Hospital; Ralph Norman, London Hospital; John Edward Hocking Parsons, Cambridge University and Guy's Hospital; Edward Mountjoy Pearce, University College and Royal Infirmary, Bristol; James Wilson Pettinger, Cambridge University and St. George's Hospital; Francis Augustus Pitts-Tucker, St. Thomas's Hospital; David Llewelyn Kurtz Prichard, University College, Hospital; Alfred Ernest Priddle, Cambridge University and St. Mary's Hospital; John Haslewood Roberts, Guy's Hospital; John Hugh Ripon Robinson, London Hospital; Horace Sampson Roch, King's College Hospital; Algernon Edward Rouse, St. George's Hospital; David Samuel, St. Mary's Hospital; John Edgar Simpson, University College Hospital; Benjamin Holroyd Slater, Cambridge University and Middlesex Hospital; Frederic George Stacey, Cambridge University, Yorkshire College, and General Infirmary, Leeds; Arthur John Stanley, Mason College, Queen's, and General Hospitals, Birmingham; Bertram Crossfield Stevens, Durham University and St. Thomas's Hospital; Roland Arthur Stevenson, Owens College and Royal Infirmary, Manchester, and St. Thomas's Hospital; Harry Carlile Sturdy, Guy's Hospital; Eustace Talbot, Cambridge University and St. Bartholomew's Hospital; Noel Unsworth, St. Thomas's Hospital; Ralph Harry Vincent and Lewis Augustus Walker, St. Bartholomew's Hospital; James Wallbrook and William Wright, Owens College and Royal Infirmary, Manchester; William Bertram Watson, Durham University and St. Mary's Hospital; Thomas Halford Wilkins, University College and Mason College, Queen's, and General Hospitals, Birmingham; John Abernethy Willett, Oxford University and St. Bartholomew's Hospital; William Frederick Willis and Gerald Denton Winston, St. Mary's Hospital; Oscar Clayton Worthington, Guy's Hospital; and Ernest Arnold Wraith, Yorkshire College and General Infirmary, Leeds.

The following gentlemen passed the First Professional Examination for the Diploma of Fellow in Anatomy and Physiology at a meeting of the Board of Examiners on Monday, May 15th:—

William Henry Wynn, B.Sc. Lond., Mason University College, Birmingham; Henry McIlree Williamson Gray, M.B., C.M. Aberd., Aberdeen University; Robert James Johnstone, B.A., M.B., Royal University, Ireland; John Alexander Douglas Radcliffe, Queen's College, Belfast; William Percy Gowland, Owens College, Manchester; and Alfred Parkin, Durham University College of Medicine.

14 gentlemen were referred to their professional studies for six months.

Tuesday, May 16th:

Owen William Richards, M.A. Oxon, Oxford University; Campbell Dykes, M.B. Lond., M.R.C.S. Eng., L.R.C.P. Lond., University College, London; Edward Fow Fisher, London Hospital; George Ernest Gask, M.R.C.S. Eng., L.R.C.P. Lond., St. Bartholomew's Hospital; Kenneth Edward Crompton, B.A. Cantab., Cambridge University and St. Thomas's Hospital; and Darell Winn Bishop, St. Mary's Hospital.

14 gentlemen were referred to their professional studies for six months.

Wednesday, May 17th:

Michael Abdy Collins and Frederick Curtis, Guy's Hospital; Francis Astley Cooper Tyrrell, M.B., B.C. Cantab., M.R.C.S. Eng., L.R.C.P. Lond., Cambridge University and St. Thomas's Hospital; Norman Carpmael, St. Thomas's Hospital; Joseph Oliver Skevington, M.R.C.S. Eng., L.R.C.P. Lond., St. Mary's Hospital; Rodolph de Salis Stawell, M.B., B.C. Cantab., M.R.C.S. Eng., L.R.C.P. Lond., Cambridge University and St. Bartholomew's Hospital; Gilbert Smith, M.B. Durh., M.R.C.S. Eng., L.R.C.P. Lond., Durham University and St. Bartholomew's Hospital; Cecil Banting, M.B., B.S. Lond., M.R.C.S. Eng., L.R.C.P. Lond., University College, London; and Leslie Baldwin Aveling, B.A. Camb., Cambridge University and London Hospital.

11 gentlemen were referred to their professional studies for six months.

Thursday, May 18th:

William Henry Bowen, Claude Tessier, and Arthur Clanpon Horner Gray, Guy's Hospital; Robert Gow Ralston, M.B., C.M. Edin., M.R.C.S. Eng., L.R.C.P. Lond., Edinburgh University, St. Bartholomew's Hospital, and King's College, London; Francois Hendrick Wessels, B.A. Mich., Michigan University and St. Bartholomew's Hospital; George Frederick Darwall Smith, B.A. Oxon., Oxford University and St. George's Hospital; Adrian Caddy, St. George's Hospital; Richard Sobey Oliver, M.R.C.S. Eng., L.R.C.P. Lond., King's College, London; and Harold Edward Ridewood, London Hospital.

11 gentlemen were referred to their professional studies for six months.

Friday, May 19th:

John Hunter Henderson, M.B., C.M. Edin., M.R.C.S. Eng., L.R.C.P. Lond., Edinburgh University and King's College, London; Marmaduke Stephen Mayou, M.R.C.S. Eng., L.R.C.P. Lond., King's College, London; Edward Walter Bain and Israel Stusser, London Hospital; Herbert William Carson, M.R.C.S. Eng., L.R.C.P. Lond., St. Bartholomew's Hospital; and Richard Eugene Harcourt, M.D., M.Ch., Royal University, Irel., Queen's College, Belfast, and King's College, London.

14 gentlemen were referred to their professional studies for six months.

Saturday, May 20th:

Henry Francis Bellamy, Charing-cross Hospital; Wilfred Batten Lewis Trotter, M.R.C.S. Eng., L.R.C.P. Lond., University College Hospital; Hugh Mallinson Rigby, M.R.C.S. Eng., L.R.C.P. Lond.; and Charles Edward Ham, London Hospital.

15 gentlemen were referred to their professional studies for six months.

UNIVERSITY OF LONDON.—At the M.B. examination in May the following candidates were successful:—

First Division.—William Bury Anderton, Owens College and Manchester Royal Infirmary; Arthur Hunton Carter, Guy's Hospital; Herbert Sherwell Clogg, Charing-cross Hospital; Agnes Sarah Edmonds, B.A., London School of Medicine and Royal Free Hospital; and Frank Redmayne Greenwood, Mason College, Queen's Hospital, and General Hospital, Birmingham.

Second Division.—Francis Victor Owen Beit, St. Bartholomew's Hospital; William Marmaduke Bergin, University College, Bristol, and St. Bartholomew's Hospital; Charles Thompson Bishop, Charing-cross Hospital; Harold Burrows, St. Bartholomew's Hospital; Francis John Hughtrede Cann, Guy's Hospital; Lucy Beatrice Clapham, London School of Medicine and Royal Free Hospital; Arthur Ernest Clarke, Guy's Hospital; David Davies, University College; Robert Halstead Dixon, St. Mary's Hospital; Herewald Evelu. Croker Fox, Guy's Hospital; Henry Norman Goode, St. Thomas's Hospital; Charles Buckman Goring, B.Sc., and Hermann Arthur Günther, University College; Henry William Harding, St. Thomas's Hospital; Alexander John Knowlton, Middlesex Hospital; Janet Waldegrave MacInnes, London School of Medicine and Royal Free Hospital; Herbert James Marriage, St. Thomas's Hospital; George Valentine Miller, University College; Ettie Sayer, Royal Free Hospital; Eliza Turner Watts, London School of Medicine and Royal Free Hospital; Philip McKinnell C. Wilmot, Guy's Hospital; Howard Edward Wise, Middlesex Hospital; and Elliot Wilson Woodbridge, St. Bartholomew's Hospital.

[N.B.—The foregoing list, published for the convenience of candidates, is provisional only, and is not final until the reports of the examiners have been confirmed by the Senate.]

THE Board of Guardians of St. Pancras have generously granted four months' leave of absence to Dr. W. M. Dunlop, medical officer of the workhouse infirmary, for the benefit of his health which has been much impaired through heavy work.

VACCINATION LITERATURE.—At the meeting of the Chipping Sodbury Board of Guardians held on May 24th a letter was read from Dr. F. T. Bond, honorary secretary of the Jenner Society, enclosing specimen tracts and leaflets on the subject of vaccination. One of the members thought they should also have some of the large posters issued by the society placed in two villages, where information was much needed upon the matter. It was eventually decided to

purchase some large posters and copies of several of the tracts and leaflets.

THE INTER-HOSPITAL CHALLENGE CUP FOR ROWING.—The annual struggle for this trophy was fought out on May 31st, the course being from Putney to Hammersmith. St. George's Hospital beat the London Hospital (the holders) and St. Thomas's Hospital easily. The winning crew was made up of two old Cambridge Blues and two Trial Eights men.

Parliamentary Intelligence.

NOTES ON CURRENT TOPICS.

Public Health Acts Amendment Bill.

THIS Bill has been referred to a Select Committee of the House of Commons which has among its members Dr. Clark, Dr. Fox, Dr. Farquharson, Mr. T. W. Russell, and Sir Francis S. Powell. The Committee is empowered to call witnesses if this course is considered necessary.

The Treatment of Inebriates.

A Bill has been introduced by the Government to make one or two small amendments in the Inebriates Act of last year, and Mr. PICKERSGILL has given notice that on the motion for its second reading he will move this amendment—viz., "That this House declines to proceed with the Bill until the means have been provided for putting into operation the Inebriates Act, 1898." The object of Mr. Pickersgill is of course to draw attention to the present unsatisfactory state of things in which magistrates find it impossible to exercise their powers under the Act.

The Registration of Plumbers.

After many attempts to pass a private Member's Bill for creating a national system of registration for plumbers Mr. KNOWLES has fallen back upon a resolution declaring that the Government should introduce legislation dealing with the subject. This resolution is down for debate on Tuesday, June 13th.

The Midwives Bill.

The adjourned debate on the second reading of the Midwives Bill was put down in the House of Commons for Wednesday, May 31st, but when it was reached at that sitting objection was taken to its progress and the order was further postponed.

Seats for Shop Assistants.

A Bill applying to England and Ireland which enacts that a certain provision of seats shall be made for shop assistants has been introduced into the House of Commons by Sir John Lubbock. When its second reading was moved some weeks previously objection was taken on behalf of the Government, but on Wednesday, May 31st, when the motion was repeated, no objection was taken and a second reading was given to the measure.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, for publication in the next number.*

ABRAHAM, PHINEAS S., M.A., M.D., B.Sc., F.R.C.S. Irel., has been appointed Surgeon to the Hospital for Diseases of the Skin, Blackfriars, London, S.E.

BREWRIDGE, R. HARDING, B.A. Oxon., B.Sc. Lond., M.R.C.S., L.R.C.P., has been appointed House Surgeon and Registrar to the Royal Orthopædic Hospital, Oxford-street and Hanover-square, London, vice E. L. Evans, resigned.

BROADWAY, THEODORE BELLCHAMBER, M.B., C.M. Glasg., has been appointed Medical Officer for the Roche and St. Dennis District by the St. Austell (Cornwall) Board of Guardians.

BRUCE, L. C., M.D., C.M. Edin., M.R.C.P. Edin., has been appointed Medical Superintendent for the Perth District Asylum, Murthly, Perth, vice G. M. Robertson.

CANTLIE, JAMES, M.B., C.M. Aberd., F.R.C.S. Eng., D.P.H. Lond., has been appointed a Surgeon to the Seamen's Hospital, Greenwich.

CARGILL, L. V., F.R.C.S. Eng., L.R.C.P. Lond., has been appointed Ophthalmic Surgeon to the Seamen's Hospital Society, Greenwich.

CHRISTOPHERSON, J. B., M.D. Camb., F.R.C.S. Eng., L.R.C.P. Lond., has been appointed a Surgeon to the Seamen's Hospital Society, Greenwich.

COCKILL, W. B., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Grayrigg Sanitary District of the Kendal Union.

COTTAM, F. H. W., M.R.C.S. Eng., L.R.C.P. Lond., has been appointed Assistant District Surgeon for the Town and District of Koffyfontein, Orange Free State, S. Africa, vice T. G. Hall, resigned.

COX, ALFRED, M.B., B.S. Durh., has been appointed Hon. Pathologist to the Northern Counties Hospital for Consumption and Diseases of the Chest, Newcastle-on-Tyne.

DAY, E. J., M.R.C.S., has been appointed Medical Officer under the Elementary School Teachers' Act, 1898, in the Dorchester District.

EASTMAN, JULIO B., M.R.C.S., L.R.C.P., has been appointed Junior Assistant House Surgeon to the Stockport Infirmary.

FINEMORE, J. H., L.R.C.P. Edin., L.S.A. Lond., has been appointed Medical Officer at Eidsvold, Queensland.

FOLEY, T. Mc C., L.R.C.P., L.R.C.S. Irel., has been appointed Medical Officer to the Scarborough Workhouse, vice M. Malvin resigned.

FOX, R. A., M.B., M.S. Edin., has been appointed Resident Medical Officer to the Hospital for the Insane, Gladdesville, New South Wales.

GREY-EDWARDS, CHARLES, B.A., M.B., B.Ch. Trin. Coll., Dublin., has been appointed Medical Officer for the No. 1 Anglesey District by the Bangor and Beaumaris Board of Guardians.

HAWTHORNE, E. S., L.R.C.P., L.R.C.S. Irel., has been appointed Medical Officer at Georgetown, Queensland.

HEWLETT, R. T., M.D. Lond., M.R.C.P., M.R.C.S., D.P.H. Lond., has been appointed a Physician to the Seamen's Hospital Society, Greenwich.

HUGHES, J. B., M.B., B.C. Camb., L.R.C.P. Lond., M.R.C.S., has been appointed Senior Resident Medical Officer to the Toxteth Workhouse.

HUGHSTON, R. W., M.B., Ch.B. Melb., has been appointed Officer of Health for Belfast Shire, Victoria, Australia, vice W. H. Shirreff, resigned.

JOULE, JOHN, L.R.C.P. Irel., L.S.A., has been appointed Medical Officer and Public Vaccinator to the Combined Districts of Halberton, Sampford Peverell, and Uplowman in the Tiverton Union.

KIRKPATRICK, T. P. C., M.D., B.Ch. Dubl., has been appointed Anæsthetist and Clinical Registrar to Dr. Steevens' Hospital, Dublin.

LINDSAY, H. S., L.R.C.P. Lond., M.R.C.S., has been appointed Acting Medical Officer at Longreach, Queensland.

MANNING, F. N., M.D. St. And., M.R.C.S., has been appointed a member of the Board of Health of New South Wales.

MARSHALL, C. F., M.D., B.Ch., B.Sc. Vict., F.R.C.S. Eng., has been appointed Assistant Surgeon to the Hospital for Diseases of the Skin, Blackfriars, London, S.E.

MOUNTAINE, JOHN, L.S.A. Lond., has been appointed a Public Vaccinator for the District of Maungaturoto, New Zealand.

PAINE, HENRY, M.D., C.M., Toronto, L.R.C.P. and S. Ed., L.F.P.S. Glasg., has been appointed Medical Officer of Health by the Bampton (Devon) Urban District Council.

PARR-DUDLEY, A. D., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Fifth Sanitary District of the Chipping Sodbury Union.

PAYNE, J. F., M.D., F.R.C.P., has been appointed Consulting Physician to the Hospital for Diseases of the Skin, Blackfriars, London, S.E.

RANKIN, G., M.D. Glasg., F.R.C.P. Edin., M.R.C.P. Lond., has been appointed a Physician to the Seamen's Hospital Society, Greenwich.

REES, D. C., L.R.C.P. Lond., M.R.C.S. (of the London School of Tropical Medicine), has been appointed Superintendent and Medical Tutor to the Seamen's Hospital Society, Greenwich.

RENNIE, G. E., M.D. Lond., M.R.C.S., has been appointed Pathologist to the City of London Hospital for Diseases of the Chest, Victoria-park, E.

REYNOLDS, J. H., M.B., C.M. Edin., has been appointed Assistant Medical Superintendent to the Brentford Union Infirmary.

ROWLANDS, D. C., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Medical Officer for the Cwmaman Sanitary District of the Llandilofawr Union.

SELLORS, T. B., L.S.A., has been appointed Assistant Medical Officer to Grove Hall Asylum, Bow, E.

SOUTE, H., M.B. Melb., has been appointed Acting Public Vaccinator and Certifying Medical Officer for the Factories' and Shops' Act, Metropolitan District, Melbourne, Australia, vice W. Daish.

SPRINGTHORPE, J. W., M.D., Ch.B. Melb., M.R.C.P. Lond., has been appointed a member of the Dental Board of Victoria, Australia.

STEVENS, T. G., M.D., B.S. Lond., F.R.C.S. Eng., M.R.C.P. Lond., has been appointed Assistant Physician to the Hospital for Women, Soho-square, London.

THORNTON, G. L., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Seventh Sanitary District of the Barnstaple Union.

VIOLETTE, W. B., M.B., Ch.M. Glasg., has been appointed Medical Superintendent of the New South Wales Government Hospital, Little Bay, near Sydney.

WALKER, HENRY SECKER, F.R.C.S. Eng., has been appointed one of the Hon. Ophthalmic and Aural Surgeons to the General Infirmary at Leeds, vice H. Bendelack Hewetson, deceased.

WEBSTER, J. CLARENCE, M.D. Edin., F.R.C.P. Edin., has been appointed Professor of Obstetrics and Gynæcology to Rush Medical College, University of Chicago.

WILLIAMS, J. W., M.B., Ch.M. Edin., has been appointed Health Officer and a Public Vaccinator for the Port and District of Gisborne, New Zealand.

Vacancies.

For further Information regarding each vacancy reference should be made to the advertisement (see Index).

BEDFORD COUNTY HOSPITAL, Bedford.—Assistant House Surgeon for six months. Board, lodging, and washing provided, and an honorarium of £10 given.

BEDFORD COLLEGE, London (for Women), York-place, Baker-street, W.—Lectureship in Bacteriology.

BOROUGH ASYLUM, Portsmouth.—Junior Assistant Medical Officer. Salary £100, with board, lodging, and washing.

BOROUGH OF HOVE, Sussex.—Medical Officer of Health and Medical Officer for the Hospital for Infectious Diseases. Salary £450 a year, rising £25 annually to £550. Applications to the Town Clerk, Town Hall, Hove.

BRADFORD CHILDREN'S HOSPITAL.—House Surgeon. Salary £80, with board, residence, and washing.

BRADFORD UNION WORKHOUSE.—Resident Assistant Medical Officer for one year, unmarried. Salary £100, with prescribed rations and apartments. Applications to the Clerk to the Guardians, 22, Manor-row, Bradford.

BRIGHTON, HOVE, AND PRESTON DISPENSARY, Queen's-road, Brighton.—House Surgeon to the Western Branch. Salary £140 per annum, with furnished apartments, coals, gas, and attendance. (No board allowed or Locum Tenens paid by the institution.)

BURGH OF PAISLEY.—Medical Officer of Health. Salary £400 per annum. Applications to the Clerk to the Local Authority, Municipal Buildings, Paisley.

BURY INFIRMARY.—Junior House Surgeon. Salary £60, with board, residence, and attendance.

CARDIFF UNION.—Assistant Medical Officer for the Workhouse for one year. Salary £100 per annum, with rations, apartments, attendance, and washing. Subject to statutory deduction. Applications to the Clerk, Queen's Chambers, Cardiff.

CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's Inn-road, W.C.—Junior House Surgeon. Salary at the rate of £50 per annum.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria-park, E.—Second House Physician for six months. Salary at the rate of £30 per annum, with board and residence.

COUNTY ASYLUM, Rainhill, near Liverpool.—Senior Assistant Medical Officer, unmarried. Salary commences at £225 per annum, with prospect of increase to £250, with furnished apartments, board, attendance, and washing.

EDAY, Orkney.—Medical Officer, male or female. Salary from the Parish Council £50, from the Medical Association £20. Applications to the Clerk of Parish Council, Eday.

GENERAL INFIRMARY AT GLOUCESTER AND THE GLOUCESTERSHIRE EYE INSTITUTION, Gloucester.—Physician.

GENERAL INFIRMARY, Leeds.—Honorary Assistant Ophthalmic and Aural Surgeon.

GERMAN HOSPITAL, Dalston.—Honorary Assistant Physician.

GUEST HOSPITAL, Dudley.—Assistant House Surgeon for six months. Salary £40 per annum.

HOSPITAL FOR SICK CHILDREN, Great Ormond-street, Bloomsbury, London.—Medical Registrar and Pathologist for one year. Honorarium of 50 guineas. Also Surgical Registrar for one year. Honorarium of £40. Also House Physician for six months. Unmarried. Salary £20, with board and residence in the hospital. Also Anæsthetist for one year. Honorarium £15 15s. Also Assistant Physician. Also House Surgeon for six months. Unmarried. Salary £20, with board and residence in the hospital.

KING'S NORTON UNION.—Resident Deputy Medical Officer at the infirmary and the workhouse at Selly Oak, near Birmingham. Salary £170 the first year, rising £10 yearly to £200 per annum, with furnished residence. Rations or attendance not provided. Appointment subjected to statutory deductions. Applications to the Clerk, 10, Newhall-street, Birmingham.

KNIGHTON UNION.—District Medical Officer and Public Vaccinator for the Llanbister. Salary £100 per annum, with certain medical fees. Appointment subject to statutory deductions. Applications to the Clerk, Knighton, Radnorshire.

LIVERPOOL HOSPITAL FOR CANCER AND SKIN DISEASES.—Three Senior and three Assistant Honorary Surgeons.

MANCHESTER HOSPITAL FOR CONSUMPTION AND DISEASES OF THE THROAT AND CHEST.—Assistant Medical Officer. Honorarium £25 per annum.

NORFOLK COUNTY ASYLUM, Thorpe, near Norwich.—Junior Assistant Medical Officer, unmarried. Salary £110 per annum, with £10 annual increase to £160, and board (no liquors), lodging, and washing.

NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney-road, Shoreditch.—Surgeon. Also House Surgeon for six months. Salary at the rate of £50 per annum. Applications to the Secretary, City Office, 27, Clement's-lane, Lombard-street, E.C.

OWENS COLLEGE, Manchester.—Senior Demonstrator in Physiology. Stipend £150 per annum, rising to £200.

ROYAL HANTS COUNTY HOSPITAL, Winchester.—House Physician, unmarried. Salary £65 per annum, with board, residence, &c. Also Honorary Physician-in-Ordinary.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City-road, London.—Resident Medical Officer for six months. Salary at the rate of £100 per annum, with furnished apartments, board, and washing.

ROYAL VICTORIA HOSPITAL, Bournemouth.—House Surgeon. Salary £80 per annum, with board.

SEAMEN'S HOSPITAL SOCIETY (Dreadnought), Greenwich, S.E.—Surgeon to the Dispensary, 51, East India Dock-road, E. Salary £63 per annum.

SHAFTESBURY HOUSE PRIVATE ASYLUM, Formby, near Liverpool.—Junior Medical Officer. Salary £50 per annum, with board, lodging, and washing.

STAFFORDSHIRE GENERAL INFIRMARY, Stafford.—Assistant House Surgeon. Salary £50 per annum, with board, lodging, and washing.

ST. GEORGE'S AND ST. JAMES DISPENSARY, 60, King-street, Regent street, London.—Honorary Surgeon.

TUNBRIDGE WELLS EYE AND EAR HOSPITAL.—Female House Surgeon. Salary £60 per annum, with board and residence.

VICTORIA HOSPITAL FOR CHILDREN, Queen's-road, Chelsea, S.W., and the VICTORIA CONVALESCENT HOME, Broadstairs.—House Physician for six months. Honorarium at the rate of £50 per annum and board and lodging in the hospital.

WEST LONDON HOSPITAL, Hammersmith-road, W.—House Physician and House Surgeon for six months.

WEST NORFOLK AND LYNN HOSPITAL, King's Lynn.—House Surgeon. Salary £80, rising annually £10 to £100, with board, residence, and washing.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL, Wolverhampton.—House Surgeon. Salary £100 a year, with board, lodging, and washing.

WONFORD HOUSE HOSPITAL FOR THE INSANE, Exeter.—Assistant Medical Officer, unmarried. Salary £150 per annum, with board, apartments, &c.

Births, Marriages, and Deaths.

BIRTHS.

MACKINTOSH.—On May 22nd, at St. Ives, Platt's-lane, Hampstead, the wife of J. S. Mackintosh, M.R.C.S., L.R.C.P., of a son.

MURRAY.—On May 24th, at Harley-street, the wife of John Murray, F.R.C.S., of a son.

SCOTT.—On May 25th, at Southgate-road, Winchester, the wife of T. W. Scott, M.B., of a son.

SKIPWORTH.—On May 21st, at The Terrace, Gravesend, the wife of P. L. G. Skipworth, M.R.C.S., L.R.C.P., of a daughter.

MARRIAGES.

MITCHELL—NICKELS.—On May 20th, at Christ Church, Woburn-square, Bloomsbury, James E. H. Mitchell, M.R.C.S., L.R.C.P. Lond., &c., of Middlewich, to Maria Lois, youngest daughter of the late Samuel Nickels of Sunderland.

ROBINSON—RIDLEY.—On May 27th, at All Saints', Margaret-street, Norman B. Robinson, M.R.C.S., L.R.C.P. Lond., fifth son of the late Major-General D. G. Robinson, R.E., to Janet Fair Hurst, youngest daughter of Samuel Edwin Ridley of St. Helens, Isle of Wight.

DEATHS.

OXLEY.—On May 23th, at Basford, Nottingham, Alexander Wemyss Oxley of Rotherham, M.R.C.S., L.R.C.P. Lond., aged 25 years.

ROOCROFT.—On May 28th, at Brondesbury Villas, Kilburn, London, N.W., Wm. Roocroft, J.P., Surgeon, late of Wigan, in his 70th year.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

Notes, Short Comments, and Answers to Correspondents.

SWEATING THE MEDICAL MAN.

IT was recently said in the lay press that the friendly societies were anxious to amend the unfortunately strained position existing between them and the medical profession. Proposals were to be made by the societies to meet representatives of the medical profession, when it was anticipated that amicable decisions would be arrived at concerning the numerous points at issue. Upon what these points were and are we need not expatiate, for our articles entitled "The Battle of the Clubs" have given them sufficient publicity. When we were also informed in reference to the *rapprochement* that the friendly societies would on no account submit to the imposition of a wage limit we ceased to take much interest in the conference. One of the principal things which we have urged against different medical aid societies is that they allow persons perfectly well able to pay proper fees for medical attendance to obtain the services of a practitioner at a nominal cost. This gross abuse of medical service is one that, to our thinking, is not capable of being dealt with by any form of affable compromise. If a man can pay his medical adviser a fee he ought to do so and he ought not to attempt to extract almost gratuitous assistance from a very hard-working and poorly paid class of the community.

The medical aid associations do not allow that their medical officers are underpaid, but are in the habit of speaking of these appointments rather as prizes. They speak of "regular work, regular pay, and no bad debts," as though an income that can never be more than, say, £200 per annum, were a more desirable thing than one that may be £1000 but can never be less than £500. Our view is that if the pay is obviously out of all proportion small to the amount of work required and the amount of skill that must be displayed to do that work, the fact that it comes regularly makes it no larger—no more adequate to the services of the employed. And it is with this view—very clear in our minds—that we give publicity to the following abstract of a circular which has just reached us:—

COURT "HEATHERBELL," No. 5599,

OF THE

ANCIENT ORDER OF FORESTERS' FRIENDLY SOCIETY,

HELD AT

ST. JAMES' HALLS, 217, STIRLING ROAD, GLASGOW.

APPOINTMENT OF MEDICAL OFFICER.

The circular goes on to say that "applications are invited for the appointment of medical officer of the above-named Court 'Heatherbell.' The membership is 730, of which number 689 are residing within the three miles' radius. The office is at present held by Professor John Glaister, M.D., who has tendered his resignation on account of his appointment to the Chair of Forensic Medicine at the University of Glasgow, and his term of office will expire on July 13th next, on which date a successor falls to be elected."

An excerpt from the Court Rules, "being the rule under which the appointment is made and held," says that "the surgeon shall be paid for each financial member residing within a radius of three miles from the Court-room, according to agreement at his election." The circular is signed, "By Order of Committee, John Brown, secretary," and a postscript, initialed "J. B.," is as follows: "The rate is to be offered by the candidates. I expect the rate to be acceptable to the members would require to be 2*s.* 6*d.* per member per annum."

We do not know how much of Professor John Glaister's valuable time was absorbed by affording "proper and sufficient medical and surgical attendance and medicine during their affliction" (excerpt from the Court Rules) to a community of 689 souls, but we trust that he received for his services a little more than the ½*d.* or ¾*d.* per week which "J. B." thinks will be an acceptable rate to the members of Court "Heatherbell," No. 5599. Intending candidates, says Mr. John Brown's circular, must have their applications lodged with him not later than May 18th, so that it is now too late to express a hope that no medical man will propose to take the post at the disgracefully low terms suggested by "J. B." But it is not too late for any candidate who has offered to look after the health of 689 persons and supply them with medicines for £86 2*s.* 6*d.* per annum to reconsider his action and withdraw his name. The complete medical charge of 689 persons may take a large proportion of one man's time—i.e., of course, if he gives to his duties the care that a conscientious man would always desire to give. The time and the remedies of a qualified medical man are worth more than £86 2*s.* 6*d.* per annum.

It is surprising to us that the public do not see that the present system of procuring medical attendance at the lowest contract price while it shuts them out from the best class of general practitioners lays them open to grave risks at the hands of the unscrupulous. Out of a salary of £86 2*s.* 6*d.* it would appear that the medical officer of health of Court "Heatherbell," No. 5599, must find medicines as well as treatment for all the sick of 689 persons. Will there be no temptation to him to choose the less expensive remedies?

A CASE FOR ARBITRATION.

WE have received from the secretaries of the East Suburban Medical Protection and Medico-Ethical Society, Limited, copies of a long correspondence which has taken place between the society and the secretary of the Maternity Charity and District Nurses' Home, Plaistow. There have been sundry passages at arms on previous occasions between the representatives of the Plaistow institution and those of the local medical practitioners to which we have referred from time to time. (THE LANCET, August 27th, 1898, p. 579, *et passim.*) The medical practitioners have recently demanded as a right to be represented on the board or governing body of the Maternity Charity. This the committee of the Charity has refused although the Poor-law officers for the district have been invited to serve as *ex-officio* members of the committee. From the general tone of the correspondence it is obvious that each side considers itself to be in the right and each side is apparently inflexible. No expression of opinion would be of any practical use. This being so we think that arbitration is the only way out of the difficulty.

"AN OBJECT LESSON."

To the Editors of THE LANCET.

SIRS,—Requiring the aid of a land agent for the sale of some property I wrote to five or six and offered what I thought a very substantial sum (£50) for what was really quite a small transaction. All replied that they would only undertake the work at charges (alike) but considerably higher. These gentlemen find it advantageous to work on these lines. Will the medical profession never learn to pull together and thus mutually help one another? I am, Sirs, yours faithfully,

May, 1899. NEMO.

PERSONATION.

To the Editors of THE LANCET.

SIRS,—It has lately come to my knowledge that a man calling himself Dr. E. F. M. Alleyne has been seeking appointments as Assistant, &c., and as I am the only E. F. M. Alleyne on the Medical Register I would warn all medical men against employing him.

I am, Sirs, yours faithfully,

E. F. MASSY ALLEYNE, L.R.C.P. & S. Irel.

Jaffa, Cullompton, May 30th, 1899.

DIET IN PULMONARY TUBERCULOSIS.

To the Editors of THE LANCET.

SIRS,—Can some of your readers kindly supply me with the scale of diet, approximately, both as to quantity and quality, which is given to patients suffering from pulmonary tuberculosis when in its earliest stages at the establishment in the Mendip Hills?

I only want to know about the diet as the details of the open-air treatment of phthisis I understand.

I am, Sirs, yours faithfully,

May 30th, 1899. A. G. P. GIPPS.

"THE FUND FOR THE RELIEF OF THE WIDOW OF THE LATE MR. H. KINGSLEY HUNTER, L.S.A."

To the Editors of THE LANCET.

SIRS,—Kindly allow me to acknowledge through your columns the receipt of the following donations to this fund, making a total of £62 13*s.* 3*d.* I am, Sirs, yours faithfully,

RIVERS WILLSON, Treasurer.

42, Wellington-square, Oxford, May 30th, 1899.

	£	*s.*	*d.*		£	*s.*	*d.*
Dr. Stuart Tidey	1	1	0	Professor Windle	1	1	0
Dr. Danford Thomas ...	2	2	0	Mr. P. J. Baronoff	0	10	0
Sir Hugh R. Beevor	2	2	0	Mr. J. Ronald Polson ...	1	1*	0
Dr. Duncan M. Mackay...	0	10	6	Mr. Henry T. Butlin ...	1	1	0
Prof. Vaughan Harley ...	1	1	0	Mr. T. Garrett Horder ...	0	10	6
W. B. J.	0	10	6	Mr. Wm. Ashby	1	1	0
Dr. Leslie Phillips	1	1	0	Dr. Thos. R. Lombe ...	1	1	0
Mr. J. C. Cook	0	10	6	L.M.S.S.A. Lond.	0	5	0
Mr. R. Simpson...	0	10	6	Mr. John E. B. Wells ...	1	1	0

"THE CLERGYMAN AND THE MEDICAL MAN."

To the Editors of THE LANCET.

SIRS,—Concerning "Senex's" letter and your remarks upon it (p. 1468 of THE LANCET of May 27th), our medical officer of health tells me both refer to Cockington and to myself. I never answer anonymous letters, and especially when containing personal attacks. They are more or less cowardly things, and "Senex's" letter is no exception. The letter is also a misrepresentation as to fact, but I would add that judging only from words quoted by "Senex" I should in the main agree with your criticisms.

I send you a copy of a letter which I wrote to the medical officer of health as to closing Sunday schools, dated May 18th:—

DEAR DR. M——,—I wish I could at once say "yes" to your request. It is a cause of regret to me that I cannot. When the Sunday schools were last closed the time of such closing was to be four Sundays. The Church schools were closed for such period. Others promised that this rule should be observed, but it was *evaded* or set aside in a way that was judged not straightforward by others beside myself and those working with me. There can be no pledge given that if the Church schools are closed that same course of action referred to will not be again followed by which our work was injured and children enticed from the Church. I think those who carry on the Sunday school work in the ——, Mr. ——, for instance, can throw light on this subject

re the past keeping of promises. If *all* Sunday schools could be closed upon conditions that all would keep *without evasions* that would be another matter, and would give me what would be a real pleasure to me—the chance of doing what you wish to be done. If it seems worth your while to show this letter to anybody concerned I shall be quite willing. I am, yours truly,

J. HENNING.

You will see that on the above date (and, indeed, before that) I promised the medical officer of health I would close the Church schools if he could obtain reliable promises of others to close theirs. It is surely no use to close one school without closing all. I trust to your sense of fairness to insert this in the next issue of THE LANCET and though I would leave the matter in your hands as to omission of names yet I would prefer that names should be inserted, for I try to practise honesty even as I love it.

I am, Sirs, yours faithfully,

JAMES HENNING, Vicar of Cockington.

Cockington Vicarage, Torquay, May 29th, 1899.

P.S.—The medical officer of health has, this morning only, brought me the promises of others and I at once agreed to close the Sunday schools.

RE THE VACCINATION ACT, 1898.

To the Editors of THE LANCET.

SIRS,—Probably the following incident may be of interest to your readers and at the same time it will show how the guardians' conception of the public vaccinator's duty may be formulated. The letter appended was from a patient of mine (in humble circumstances) whose child, being four months old on Jan. 1st, 1899, I had refused to vaccinate on account of its having barely recovered from an attack of pertussis followed by broncho-pneumonia. The second certificate of postponement expired on March 25th, but as I was myself ill from March 23rd to April 26th a renewal was by some means overlooked. By that time the developments were as here given:—

"DEAR DR. A B,—When Dr. X Y first came to vaccinate the baby he gave me no notice to say that he was coming or when he was coming. He wanted to insist upon vaccinating the baby then. He was very angry when I refused and he spoke of you in a disparaging and objectionable manner and said you had not proper instruments. He endeavoured to undertake the medical treatment of the baby although he knew that the baby was a patient of yours and sent some medicine for baby. I returned the bottle of medicine to him again. He has been to see me six times and has talked and argued for a considerable length of time on each occasion, but has not at any time given me previous notice of his intention to call. He says I am robbing him of 13*s.* if I permit you to perform the vaccination and that if he does not do it he will neglect me should I ever have occasion to send for him as parish doctor. I will rely upon you to vaccinate baby when fit.

"I am, Sir, yours sincerely,

"C D."

I complained of this unofficially to an influential member of the board of guardians and also unofficially to the clerk to the board, and from each I received a letter stating that "the officer had acted strictly in accordance with his instructions." Mrs. C D also has sent a slip of paper which contained the following *in Dr. X Y's writing:* "Dr. X Y put me to no expense. Dr. X Y did not abuse me in any way. Dr. A B did not refuse to vaccinate my child before Dr. X Y first called. Dr. A B stated that if anyone vaccinated the child he would bring an action against them." On the back of this slip Mrs. C D wrote: "Dr. X Y asked me to agree to this, copying it out in my handwriting, but I refused to do either."

I enclose names in full. Further comment is unnecessary on my part, but yours will be valued. I am, Sirs, yours faithfully,

May 29th, 1899. A B.

*** We recommend A B to send the paper in X Y's handwriting to the guardians and to ask them what they propose to do.—ED. L.

THE MEMORIALS OF THE CORPORATE AND MEDICAL REFORM ASSOCIATION, LIMITED.

WE have received a communication from certain of the gentlemen who are signing the memorials from the Corporate and Medical Reform Association, Limited, to the General Medical Council protesting against what they consider encroachments upon the field of medical practice (see THE LANCET, May 13th and 20th), and complaining that in our reference to the matter the reasons for their proceedings "are not fully given as set forth in the memorials, nor have as yet, been given fully and explanatorily" in our columns. They have, they say, "subscribed to the voluntary fund for its purposes, not merely on the narrow grounds of apprehension, suggested in your article, (*a*) of loss to the ophthalmic surgeon; and (*b*) of encroachment on his professional position; but also on broad grounds of public and professional interest, because we do not perceive in this exploitation of the profession the probability of that benefit to the public which it is a matter of surprise to us you should expect. It is more likely, we think, to prove an injury to the public, bringing advantage to ophthalmic surgeons; but in the case of illicit practice, as of other human ills, we believe our first duty is to the public and lies in prevention rather than cure." We are happy to give publicity to this explanation.

We regret that our space did not allow us to publish the memorial in full, and in doing so are reminded that communications from the Corporate and Medical Reform Association, Limited, do not err on the side of brevity. When the Association—or perhaps we should say certain of those whose signatures are attached to the memorial or memorials in question promoted by the association—complain that they have not received the assistance of the press "even by full publication of our communications and transactions," they should be sure that the matter for which they seek publicity has been reasonably condensed and presented in a comprehensible manner and a proper form for printing.

The Hon. Secretary of the Corporate and Medical Reform Association, Limited, desires to acknowledge with thanks the following donations to the Special Voluntary Fund received in addition to those acknowledged in THE LANCET of May 20th:—

	£	*s.*	*d.*		£	*s.*	*d.*
Dr. Hubert C. Bristowe	0	10	6	Dr. Hern	0	10	6
Mr. Colin Campbell ...	0	5	0	Dr. Samuel Lodge, jun.	2	2	0
Mr. John Griffith	1	1	0	Mr. J. Elliot Square ...	0	10	6

UNPROFESSIONAL CONDUCT?

To the Editors of THE LANCET.

SIRS,—I shall esteem it a favour if you will kindly express an opinion upon the following case. A is a qualified assistant managing an extensive branch practice for B who resides four miles from A. In A's district is a colliery which he attends to. A month ago one of the workmen employed at this colliery sustained a fractured femur which A put up in a Liston's long splint. Up to the present the case has gone on in a most satisfactory manner and the patient has expressed gratitude for his treatment. Six or seven miles from A lives another practitioner, C. One or two old patients belonging to C happen to reside in A's district, but with these patients A never interferes upon any pretext. A few days ago C chanced to be visiting one of the patients when some of those local "disturbance mongers" which exist in all practices advised the injured workman to ask C to call and examine his leg. C did so, opening the bandages and examining the limb, which he pronounced to be all right and charged the man a guinea for doing so. This course he adopted without the knowledge either of A or his principal, and it was merely by chance that the matter came to light as the patient's friends did all in their power to conceal it. This is the second occasion upon which C has acted in this manner towards A and his employer. He is quite well aware that all the inhabitants of the district, with the exception of his two patients, are either employed at the colliery or private patients of B and his assistant. Under the circumstances ought he not to have called upon A or B, or communicated with them before taking upon himself to visit their patient and express an opinion upon the case?

I am, Sirs, yours faithfully,

May 24th, 1899. COLLIERY SURGEON.

*** There can be no doubt that in a case where there is no urgency the practitioner in attendance should be asked before another medical man makes an examination. From "Colliery Surgeon's" report no reason for anxiety was present. This also is borne out by C, who is stated to have found the limb all right. C ought to have communicated with A and B—preferably with B, the principal—before examining their patient.—ED. L.

"PHENALGIN."

MESSRS. E. J. REID, of 11, Dunedin House, Basinghall-street, E.C., write with reference to an analytical notice of this preparation which appeared in THE LANCET of May 20th that "Phenalgin is put up solely for the medical man to prescribe and the chemist to dispense," pointing out that we had "inadvertently suggested that Phenalgin is sold to the public."

N. Y. Z.—Nirvana, in Buddhist theology, is the state or condition of final perfection which the soul can reach after death. The word literally means "going out," as of a flame, and was originally applied to the going out of the flames of desires or passions. In early Buddhism the state was not defined, but later it came to mean the union of the soul with, or its absorption by, the essence of Divinity, and still later complete annihilation. This latter idea was, of course, an easy transition from the literal meaning of the word. It will be remembered how Alice in Wonderland tried to remember what the flame of a candle was like after it was blown out, "but she could not remember ever having seen such a thing."

M.D. Bruz.—The article is not quite suitable for our columns.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 A.M. by Steward's Instruments.)

THE LANCET Office, June 1st, 1899.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Rain-fall.	Solar Radia in Vacuo.	Maximum Temp. Shade.	Min. Temp	Wet Bulb.	Dry Bulb.	Remarks at 8.30 A.M.
May 26	30·07	N.E.	...	90	56	40	43	48	Cloudy
,, 27	30·25	N.E.	...	98	50	40	43	48	Cloudy
,, 28	30·41	N.E.	...	103	62	41	46	52	Cloudy
,, 29	30·40	E.	...	108	67	43	48	54	Fine
,, 30	30·37	S.W.	...	102	72	47	51	56	Hazy
,, 31	30·31	S.W.	...	114	77	50	53	59	Fine
June 1	30·23	S.E.	...	121	79	55	57	63	Fine

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY (5th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (2 P.M.), St. Mary's (2.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M.).

TUESDAY (6th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M. and 6 P.M.), Royal Ear (3 P.M.).

WEDNESDAY (7th).—St. Bartholomew's (1.30 P.M.), University College, (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), St. George's (Ophthalmic 1 P.M.), St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.), Westminster (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.), Cancer (2 P.M.).

THURSDAY (8th).—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.), St. Mark's (2 P.M.).

FRIDAY (9th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), St. Mary's (2 P.M., Ophthalmic 10 A.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.), West London (2. 30 P.M.), London Throat (2 P.M. and 6 P.M.).

SATURDAY (10th).—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), St. Mary's (10 P.M.), London Throat (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

WEDNESDAY (7th).—OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Specimens will be shown by Mr. Stott, Mr. Malcolm, Dr. Stevens, and others. Papers:—Dr. Lewers: A Case of Persistent Mento-posterior Position of the Face in which the Child was Delivered Alive by the Axis-traction Forceps.—Dr. Wilson: Hydramnion in Cases of Uniovial or Homologous Twins.

THURSDAY (8th).—OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8 P.M. Cases and Specimens. 8.30 P.M. Papers:—Dr. Rockliffe and Mr. Hainworth: Penetrating Wound of Orbit with Traumatic Meningitis, Recovery.—Dr. Beevor and Mr. M. Gunn: Case of Obliteration of a Branch of the Retinal Artery, following frequent attacks of Temporary Amblyopia.—Mr. J. B. Story: Recovery of Sight after Partial Occlusion of the Central Artery.

BRITISH GYNÆCOLOGICAL SOCIETY (20, Hanover-square, W.).—8 P.M. Lantern Demonstration:—Dr. F. W. N. Haultain (Edinburgh): On a Case of Deciduoma Malignum. Papers:—Dr. Mendes de Leon (Amsterdam): On General Disorders originating in Disease of the Female Pelvic Organs.

FRIDAY (9th).—OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8.30 P.M. Special Meeting for a Discussion on the Operative Treatment of Myopia, to be opened by Mr. F. R. Cross.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

MONDAY (5th).—CENTRAL LONDON THROAT, NOSE, AND EAR HOSPITAL (Gray's Inn-road, W.C.).—5 P.M. Mr. W. Wingrave: The Pathology of Nasal Obstruction.

WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.).—5 P.M. Dr. S. Taylor: Chlorosis and its Treatment.

TUESDAY (6th).—NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Bloomsbury).—3.30 P.M. Dr. Tooth: Neuritis (lantern demonstration).

WEST-END HOSPITAL FOR DISEASES OF THE NERVOUS SYSTEM (73, Welbeck-street, W.).—4 P.M. Dr. D. Grant: Nervous Disorders of Taste, Hearing, and Smell.

WEDNESDAY (7th).—HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST (Brompton).—4 P.M. Dr. Fowler: The Arrest of Pulmonary Tuberculosis.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester-square, W.C.).—4.30 P.M. Dr. T. D. Savill: Alopecia. (Post graduate Course).

THURSDAY (8th).—CENTRAL LONDON THROAT, NOSE, AND EAR HOSPITAL (Gray's Inn-road, W.C.).—5 P.M. Dr. D. Grant: Diagnosis and Treatment of Painful Affections.

CHARING-CROSS HOSPITAL.—4 P.M. Dr. Eden: Gynæcological Demonstration. (Post-Graduate Course).

THE HOSPITAL FOR SICK CHILDREN (Gt. Ormond-street, W.C.).—4 P.M. Mr. Kellock: Demonstration of Selected Cases.

WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.).—5 P.M. Dr. S. Taylor: Chlorosis and its Treatment.

EDITORIAL NOTICES.

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It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side of the paper only, AND WHEN ACCOMPANIED BY BLOCKS IT IS REQUESTED THAT THE NAME OF THE AUTHOR, AND IF POSSIBLE OF THE ARTICLE, SHOULD BE WRITTEN ON THE BLOCKS TO FACILITATE IDENTIFICATION.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager."*

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X.—X. Y. Z.

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THE LANCET

SPECIAL SUPPLEMENT

IN SUPPORT OF THE

METROPOLITAN HOSPITAL SUNDAY FUND

Published in aid of the Appeal to be made on Sunday, June 11th, 1899.

ONCE more it becomes our duty to lay before the readers of THE LANCET and the general public, for whose beneficent consideration this Annual Special Supplement is as much prepared as it is for that of our customary professional audience, the claims of the Metropolitan Hospital Sunday Fund upon the practical and sympathetic assistance of all London. We have made this appeal for the Fund on 13 previous years and the subject, important as it is and many-sided as it is, has been dealt with in our columns from most conceivable points of view. Consequently, and not for the first time, we have to confess that some of what we are going to say we have said before. Vary the rendering of it how we will the gist of our appeal in these supplements is now what it has been on the previous occasions, and the following words will sum it up:—The hospitals of London do noble work; the amount done by them is out of all proportion to their revenues; their slender incomes, being derived mainly from fortuitous charity, are precarious and liable to fluctuations; London, the city of untold wealth, should be able to furnish not only adequate but regular hospital accommodation for its suffering poor; Hospital Sunday provides the inhabitants of the metropolis with a regular and annual opportunity of showing their appreciation of the splendid work done by these medical charities; therefore GIVE. Give of your wealth and give of your poverty; give of your gratitude for benefits received from medical service and give of your gladness that you have been spared from sickness; give for love of man and give for love of God. To all orders of mind, to all social grades, and to all creeds alike the Metropolitan Hospital Sunday Fund must appear as a noble charity, splendidly directed, economically managed, and equitably administered. Therefore GIVE.

THE HOSPITAL AND THE COMMUNITY.

Our national system of hospitals given to and maintained for the nation by the voluntary act of the nation's individual members is one of which we are all exceedingly proud. If only the funds provided can be in any way made sufficient for the work it is evident that the voluntary method, expressing the gratitude and benevolence of the community at large, is the right one, the one which does honour both to the giver and the recipient. These two motives, gratitude and benevolence, personal thankfulness towards a system beneficent to the giver himself and goodwill towards that which aids suffering fellowmen, have made our hospitals what they are, and these two motives once thoroughly aroused in the heart of the people of the metropolis should maintain the hospitals without difficulty in the noble position which they have won. Each motive should appeal in varying degrees and for various reasons to every class. The cause of gratitude for those who are givers only, though less obvious than in the case of those who have been, or are liable to become, inmates or out-patients themselves, is none the less very real.

Take the case of the wealthy man who, crushed in a sudden accident to his carriage, lies unexpectedly at the doors of death. Should the catastrophe occur near a hospital and should his condition be such that after his admission for immediate treatment his removal is undesirable he remains an inmate till he is convalescent, with skill as great as any he could summon to his private bedside at his command, and whatever aid is rendered to him is given with no claim for remuneration beyond that which the injured man's sense of gratitude may dictate. If, on the other hand, he is taken to his private residence the medical man summoned to consult beside his pillow may be the same man who would have dealt with his case in the hospital, whose skill has been acquired within hospital walls, and whose name would have been unknown to the wealthy had not it been first known favourably to the poor and to his colleagues. No body or combination of rich men, however powerful or however wealthy, anxious to retain the highest skill for the use of its members, could do so or would ever think of doing so, to the exclusion of the humble. The medical attendant of the rich man who has been injured in a carriage accident could have gained no experience in dealing with such injuries if he had not for years been in daily contact in his hospital with the mass of sufferers to whom crushing and maiming are among the common risks of their every-day occupations. In the wards of our hospitals opportunities are given for systematic observation, record, and comparison whose value it is impossible to estimate, on which account it is not too much to say that the higher the degree of knowledge and dexterity exacted by the rich man from his medical attendant the greater reason has he to be grateful to our hospitals which offer such skill to be retained should his needs require it. We urge this point of view upon those rich men who see no other possible motive than benevolence to prompt the gifts of their fellows to the Metropolitan Hospital Sunday Fund and who for themselves claim that they find fields for their own benevolent impulses elsewhere.

To the vast mass of citizens of greater and smaller degrees

of wealth, whose medical attendants do not, as a rule, include members of the permanent staff of any hospital, we desire to point out that in their need they turn to those members of the medical profession who may exercise their skill in a circle of private patients but who must have first acquired it through the medium of hospital appointments or hospital tuition. The mass of citizens do not, save on exceptional occasions, require assistance other than that of the general practitioner who acts as their family adviser. They pay him fees commensurate, as a rule, with their own condition of life rather than with the services which he renders to them, and from the poorest of these independent patients he receives a fee which does not in any sense represent the time, trouble, and skill which he has bestowed on the case in question. It cannot be too definitely insisted that it is only the facilities afforded by our hospital system which enable the general practitioner to acquire the scientific knowledge and technical skill which he is compelled daily to display in his duty towards the community. By as much as the medical man is a necessity to the well-to-do among us by so much is the hospital a necessity also.

Of what the hospitals mean to the poor we need hardly speak, for the facts are too manifold and manifest to need much insistence or illustration. It is sufficient to say that without them a large proportion of the population of London would be compelled to abide under physical and mental troubles too terrible to contemplate. The plight of the invalid man or woman in the tiny squalid home where there is no possibility of obtaining the rest that the sick frame longs for and no money to command the ordinary requisites of life, to say nothing of the most obvious necessities in nursing or diet, really contains within itself every element of horror that is known to civilised man. No one disputes this. All allow that the sick poor form the most conspicuous objects of charity and that the readiest way to offer them that charity is to bestow our doles upon the hospitals.

THE VOLUNTARY SYSTEM.

We have alluded to our national system of hospitals as one of which the nation is exceedingly proud. Yet it cannot be denied that the deplorable pecuniary position of nearly all these great institutions has aroused in the minds of many thinkers a suspicion that it may be exactly this system—the system of voluntary support—that is wrong. Why not, they say, place the hospitals of the country once for all upon a sound financial basis by aiding them with State or municipal funds? And they ask us to look at the enormous sum which a fraction of a penny on the income-tax would produce. The size of this sum is not to be gainsaid, but against the advisability of transforming our voluntary hospitals into State-paid or rate-paid institutions there are many formidable arguments. In their origin and in their continued existence our hospitals individually have ever represented the liberality of those who have the good things of the world towards those who have not. The poor might reasonably be expected to help, but we are well aware that it is the richer class, the class which would not, or should not, be admitted either as in-patients or out-patients to the benefits of any hospital, who must always contribute the lion's share. If once a compulsory system were introduced, though only to subsidise the spontaneous charity, it would begin by diminishing and end in destroying the voluntary system altogether. Those who found themselves taxed for the hospitals would gradually cease to subscribe voluntarily, some because they would not care to pay twice over, others because they would think that their subscriptions were not needed for a State-aided institution, others because they

STATISTICS OF HOSPITAL WORK IN LONDON DURING THE YEAR 1898.

TABLE I.—GENERAL HOSPITALS.*

N.B.—The figures referring to out-patients in these Tables represent the number of VISITS *paid by out-patients—*NOT *the* NUMBER *of out-patients.*

Name of hospital.	Hospital Sunday Fund award.	In-patients.	Relieved.	Cured.	Convalescent homes.	Remaining under treatment.	Died.	Out-patients' visits.	Accidents and emergencies
	£								
Charing-cross	900	2,155	1,016	935	250	145	186	58,848	9,150
French	262	764	164	508	26	49	43	17,480	759
German	458	1,913	460	720	488	125	120	50,559	3,055
Great Northern Central	412	1,701	1,405		124	126	170	67,758	5,518
Guy's	1,125	—	—	—	—	—	—	—	—
Hampstead	120	327	82	209	12	23	13	2,327	261
Italian	47	95	95	95	—	2	—	14,749	—
King's College	1,200	2,561	1,110	1,051	250	191	209	51,331	11,535
London	3,525	11,009	4,524	5,065	1,198	631	1,048	315,751	17,370
London Homœopathic	375	1,111	279	595	2	90	72	18,551	964
Phillip's Memorial Homœopathic	26	77	14	54	—	3	2	3,140	—
London Temperance	578	1,290	401	705	30	68	100	21,696	10,911
Metropolitan	487	962	284	485	32	60	133	99,331	10,971
Mildmay Mission	225	482	88	285	120	37	25	24,798	1,847
Miller Hospital and Royal Kent Dispensary	203	292	65	167	20	15	25	35,992	6,805
North-West London	300	601	121	411	20	42	27	40,123	320
Poplar	450	998	780	135	78	58	56	23,449	—
Royal Free	750	2,151	1,825		135	150	193	94,146	16,139
St. George's	975	4,138	2,710		1,057	315	390	95,501	11,124
SS. John and Elizabeth	60	—	—	—	—	—	—	—	—
St. Mary's	1,387	3,956	935	2,213	345	221	331	96,913	2,966
Seamen's Hospital Society	787	2,548	606	1,679	40	207	187	91,400	22,850
The Middlesex	1,575	3,412	2,191		611	288	292	92,852	—
University College	1,013	2,922	860	1,449	279	152	268	56,791	30,620
Walthamstow	60	408	43	306	—	22	32	2,190	730
West Ham	270	744	213	429	5	48	44	70,326	12,089
West London	413	1,606	1,382		—	86	138	87,385	17,922
Westminster	975	2,637	2,227		409	158	252	75,000	11,423
	£18,958	50,825	12,140	17,506	5,531	3,812	4,356	1,608,387	205,319
Estimated to supply omissions	—	6,047	5,228	10,706	522	438	562	99,468	60,830
Total	£18,958	56,872	17,368	28,212	6,053	3,750	4,918	1,707,855	266,149

* We reproduce the term "General Hospitals" as employed by the Council of the Metropolitan Hospital Sunday Fund.

TABLE II.—SPECIAL HOSPITALS.

Name of hospital.	Hospital Sunday Fund award.	In-patients.	Relieved.	Cured.	Convalescent homes.	Remaining under treatment.	Died.	Out-patients' visits.	Accidents and emergencies
	£								
City of London for Diseases of Chest	731	—	—	—	—	—	—	—	—
Hospital for Consumption	1,350	1,804	1,036		240	298	230	74,338	—
North London ,,	225	460	438		—	60	22	21,012	—
Royal Hospital for Diseases of Chest	225	739	573		—	69	97	26,525	—
Royal National Hosp. for Consumption	188	840	565	—	—	129	17	—	—
Alexandra Hospital for Hip Disease	124	116	15	19	22	51	4	2,101	—
Barnet Home Hospital	34	—	—	—	—	—	—	—	—
Belgrave Hospital for Children	105	262	61	127	20	16	36	—	—
Cheyne for Incurable ,,	98	67	5	3	3	49	5	—	—
East Lond. Hosp. for ,,	375	1,512	343	772	189	56	341	79,468	8,042
Evelina Hosp. for Sick ,,	337	985	756		109	45	184	39,994	9,246
Home for Incurable ,,	53	34	—	—	—	27	1	—	—
Home for Sick ,,	109	674	—	—	144	44	14	3,383	—
Hospital for Sick ,,	525	2,067	848	710	388	138	296	89,220	—
North-East. Hosp. for ,,	225	764	224	389	88	55	94	68,551	2,705
Paddington-green for ,,	150	601	485		77	38	78	43,692	2,423
St. Mary's for ,,	94	631	51	507	81	35	54	11,597	7,207
St. Monica's for ,,	75	—	—	—	—	—	—	—	—
Victoria Hospital for ,,	413	1,265	617		446	25	108	56,279	468
Victoria Home, Margate	22	—	—	—	—	—	—	—	—
"The Vine"	30	48	17		—	26	1	—	—
British Lying-in Hospital	19	269	269	—	1	17	—	—	—
Clapham Maternity	23	331	330	—	—	—	1	7,140	—
East-end Mothers' Home	60	255	255		—	11	—	29,300	—
General Lying-in	37	546	—	—	—	—	—	10,746	—
Queen Charlotte's Lying-in	150	1,112	1,109		111	—	3	7,490	—
Chelsea Hospital for Women	781	671	627		160	47	12	10,479	—
Hospital for Women	263	728	194	474	87	55	16	22,203	—
Grosvenor Hosp. for Women and Children	37	191	108	64	6	12	7	10,019	—
New Hospital for Women	173	412	—	—	—	—	12	24,730	—
Royal Hosp. for Children and Women	169	599	555		12	44	66	33,528	10
Samaritan Free	375	542	11	413	—	18	21	22,892	—
Cancer	450	835	742		20	70	93	13,803	—
London Fever	750	599	—	591	47	71	14	—	—
Gordon for Fistula	28	226	12	208	—	6	—	4,242	—
St. Mark's	67	349	33	286	—	25	5	4,848	—
National for Diseases of Heart, &c.	52	178	106	14	23	22	13	11,404	—
Female Lock	124	662	507	—	4	64	2	—	—
Hospital for Epilepsy, &c.	49	123	92	—	5	15	1	12,562	—
National for the Paralysed, &c.	645	1,030	300	191	229	176	55	37,677	—
West-End for Nervous System	82	240	188	20	—	—	2	29,481	—
Central London Ophthalmic	15	310	310		6	12	—	30,029	240
Royal Eye	90	—	—	—	—	—	—	—	—
Royal London Ophthalmic	412	2,227	—	—	—	61	—	101,543	—
Royal Westminster ,,	75	585	—	—	20	20	2	26,002	—
Western ,,	34	—	—	—	—	—	—	—	—
City Orthopædic	41	150	—	140	—	10	2	10,000	—
National ,,	67	212	158		—	54	—	3,240	—
Royal ,,	52	229	110	74	—	45	—	3,400	—
Royal Sea Bathing Infirmary	225	173	17	102	—	76	1	—	—
St. Peter's for Stone	80	502	483		—	7	19	36,631	—
Central London Throat and Ear	30	315	57	245	5	5	3	48,318	—
London Throat	22	465	461		2	4	4	13,473	—
Metropolitan Ear and Nose	—	47	—	46	—	—	1	8,302	—
Royal Ear	8	251	—	—	—	9	—	9,694	—
The Dental	94	—	—	—	—	—	—	63,298	—
National Dental	86	—	—	—	—	—	—	30,713	—
Estimated to supply omissions	£10,603	28,233	4,552	5,395	2,545	2,117	1,937	1,183,347	30,341
	—	2,022	5,906	9,039	298	347	112	150,300	4,834
Total	£10,603	30,255	10,458	14,434	2,843	2,464	2,049	1,333,647	35,175

would hold that what the State or the township did at all it ought to do thoroughly by bearing the whole cost. Moreover, where the State or the municipality found the funds, there it would necessarily claim to raise its voice in directing the spending of them. And so instead of institutions ruling themselves independently under the guidance of their own wisest and most experienced members, ever ready to detect and censure any real misfeasance, we should have branches of a Government department aided in their administration by local municipal wisdom. The change from the present system to one of red tape and schedules no well-wisher of science or of the suffering poor would wish to see. The hospital authorities under such circumstances would inevitably be the wrong persons for the situation and could not be expected to display either the necessary sympathy and flexibility or the equally necessary single-mindedness. Men who are possibly sensible business men and capable as such of sound and economical management where the purchase of necessaries and the keeping of accounts are concerned are not to be expected to prove sound judges of scientific questions and of medical procedure. They are exposed to influences unfelt by professional men which guide them wrongly to the detriment of others besides themselves.

And there is another equally grave objection to the proposal of State-aid. What is to be the limit within which State-aided or rate-aided medical and surgical relief is to be

afforded? The question has arisen at times locally and on a small scale, but if the experiment were to be tried in London the consequences would be neither local nor small. There would unfortunately, if we may judge from the enormous abuse of the out-patient departments of the London hospitals, be no self-respecting reluctance among the well-to-do to avail themselves of State-supplied medical attendance. This reluctance certainly exists in the matter of State-paid education, for we do not hear of many parents availing themselves of the advantages of the board schools whose position is markedly different from that which was contemplated when the country undertook the free education of its poor. But the feeling that deters a man from wrongful use of a board school does not appear to deter him from abusing the charity of a hospital. No one has ever observed any unwillingness in the London public to take advantage of that which was designed for the good only of those unable to pay. Both in the in-patient and out-patient departments of the hospitals constant care has to be exercised to prevent persons from obtaining relief who could well afford to pay for it in the ordinary way in their own homes. The difficulty of dealing with the applications of such persons would be enormously increased if they thought they could claim as a right that to which they were compelled to contribute, while if once it were admitted that the right was theirs the whole character of our hospitals would at once be changed. They would be charitable institutions no longer, but would become huge State or municipal dispensaries for the community at large, while the only check on the increase of their dimensions and of the taxation necessary to maintain them would lie in reducing the comforts supplied and the general scale of their administration to the level now maintained in our workhouses or prisons. What the effect of either of these alternatives would be we need not discuss. It is enough to say that the sufferers would, to our thinking, include the general public, the patients, and the medical profession, an opinion in which medical men are not alone. In 1890 a Special Committee appointed by the House of Lords sat to investigate the whole subject of the administration and accommodation of the metropolitan hospitals and issued an elaborate report as the result of deliberations extending over two years and assisted by a large mass of expert evidence. This report, it is true, recommended improvements of organisation tending to knit the various institutions into one coöperating whole, but the Special Committee which made the recommendations had no word of approval for any scheme of throwing the hospitals upon the rates.

TABLE III.—COTTAGE HOSPITALS AND CONVALESCENT HOMES.

Name of hospital.	Hospital Sunday Fund award.	In-patients.	Relieved.	Cured.	Convalescent homes.	Remaining under treatment.	Died.	Out-patients' visits.	Accidents and emergencies
	£								
Metropolitan Convalescent	450	3,920	1,282	2,517	—	115	6	—	—
Bexhill "	225	1,865	682	1,131	—	48	4	—	—
All Saints "	413	3,675	1,493	2,006	—	136	1	—	—
Mrs. Gladstone's "	60	—	—	—	—	—	—	—	—
Hahnemann "	26	116	46	70	—	16	—	4,256	—
Hanwell "	17	—	—	—	—	—	—	—	—
Herbert "	15	469	281	130	—	37	2	—	—
Herne Bay (Baldwin-Brown) Convalescent	22	336	—	—	—	—	—	—	—
Herne Bay Mothers' Home	34	552	—	—	—	—	2	—	—
Homœopathic Convalescent	15	189	—	—	—	—	—	—	—
King's College "	49	418	84	319	—	15	—	—	—
Mrs. Kitto's "	60	330	—	—	—	—	—	—	—
London and Brighton Female Convalescent	15	2,451	—	—	—	40	1	—	—
Mary Wardell Convalescent	75	—	—	—	—	—	—	—	—
Morley House "	68	845	—	—	—	—	3	—	—
St. Andrew's (Clewer) Convalescent	112	—	—	—	—	—	—	—	—
Do. (Folkestone) "	203	2,046	1,967		—	75	4	—	—
St. John's Home for Convalescent Children	60	350	—	—	—	—	—	—	—
St. Joseph's Convalescent	37	578	235	320	—	60	3	—	—
Convalescent Home for Poor Children, St. Leonards-on-Sea	68	715	—	—	—	44	2	—	—
St. Michael's Convalescent	19	245	—	—	—	—	—	—	—
Seaside "	75	—	—	—	—	—	—	—	—
Warley "	5	72	—	—	—	—	1	—	—
Ascot Priory "	45	256	91	145	—	20	—	—	—
Police Seaside Home	30	778	—	—	—	—	—	—	—
St. Mary's Convalescent	11	113	—	—	—	—	—	—	—
Chelsea Hospital for Women Convalescent Home, St. Leonards	30	249	—	248	—	—	1	—	—
Deptford Medical Mission Convalescent Home	15	—	—	—	—	—	—	—	—
Beckenham Cottage Hospital	38	152	—	—	—	—	—	—	—
Blackheath and Charlton Cottage Hospital	52	142	—	76	1	14	9	3,848	300
Bromley, Kent, "	64	323	55	229	11	25	18	—	101
Chislehurst, Sidcup, &c. "	30	—	—	—	—	—	—	—	—
Eltham "	25	64	16	36	—	8	4	—	9
Enfield "	34	98	10	85	—	11	7	—	23
Epsom and Ewell "	45	123	8	66	24	16	9	—	5
Hounslow "	13	97	20	67	—	4	6	3,580	123
Mildmay "	53	—	—	—	—	—	—	—	—
Reigate and Redhill "	45	266	22	153	20	14	1	—	51
Sidcup "	28	125	23	90	1	6	3	433	32
Wimbledon "	26	112	12	84	—	9	5	150	—
Woolwich and Plumstead "	26	—	—	—	—	—	—	—	—
Establishment for Gentlewomen	94	158	21	120	—	13	4	—	—
St. Saviour's Hospital and Nursing Home	86	90	33	46	—	9	2	—	—
National Sanatorium for Consumption	45	281	169	—	3	59	3	—	—
Invalid Asylum	45	174	102	19	6	14	1	—	—
Firs Home	15	56	19	—	—	18	19	—	—
St. Catherine's Home	22	32	—	—	—	7	7	—	—
Friedenheim Home for the Dying	187	132	24	—	—	33	75	—	—
	£3,227	22,903	4,728	7,957	66	866	203	12,267	644
Estimated to supply omissions	—	2,325	3,647	6,796	—	246	20	—	—
Total	£3,227	25,318	8,375	14,753	66	1,112	223	12,267	644

INCREASING SUPPORT REQUIRED TO MEET INCREASING POPULATION.

No one who thinks of the matter for a moment can doubt that hospitals are absolutely necessary to the urban community, and though they do not quite fill the same place in suburban and rural districts yet there they are of extreme utility also. And while it is thus granted that modern civilisation could not, and would never dream of attempting to, do without its hospital accommodation there are also good grounds for believing that the system employed in London for maintaining that accommodation—viz., the voluntary system—is the best that could be devised, bringing as it does into play sentiments of personal sympathy and fine charity that would be entirely wanting in a system of State-levied contributions. Yet in London, the wealthiest city in the world, and perhaps the poorest, the city where there reside 10,000 people with half-a-million of money and half-a-million of people with less than no money at all,—in London where the urgent need of hospitals is no less obvious than the practical ability of the population to provide them and support them, the voluntary system does not appear to work satisfactorily. For it is no exaggeration to say that half the metropolitan hospitals are insolvent. They are spending of necessity more than they receive with certainty and they are obliged to close their wards and refuse hospitality to the sick poor—which is a form of compounding with their creditors. How are we to account for this deplorable state of affairs, and what is to be done to remedy it?

The reason why the metropolitan hospitals are so badly supported is, we are convinced, that but few people really appreciate the desperate straits in which these institutions are placed. They receive appeals—Christmas appeals, special appeals, Jubilee appeals, building fund appeals, re-endowment appeals—until they become callous to all requests. They view unmoved the chronic poverty of institutions which they ought to be proud to maintain in a position of financial stability, and comfort themselves with such thoughts as these—that "the hospitals get along all right somehow" for the institutions which declared themselves on the brink of ruin five years ago are still carrying on their work, and that the exaggeration of their poverty is a regular policy on the part of hospital authorities in their onslaught upon the purse of the public.

To the people who console themselves in this way for their neglect of the hospitals to which they owe their security in times of disease it is the duty of all who know better to speak very plainly. They should be made to understand that the piteous appeals of the secretaries and treasurers are not a mere ruse for obtaining more funds than are required—an artful dodge for securing money to be squandered in grandiose schemes of rebuilding or gorgeous equipment—but that all over London the hospitals are through no fault in their administrations spending more than their incomes in their daily task of treating the sick poor. The population of London has increased and is still increasing out of all proportion to the increase in hospital accommodation, but instead of the incomes of the hospitals rising with the number of persons dependent upon them, the number of subscribers and the amount of their subscriptions—exclusive of the support extended to the Prince of Wales's Hospital Fund for London and the Metropolitan Hospital Sunday Fund—show an actual fall. The population of London—the County Council's London—increases annually by the enormous figure of 40,000 persons (this is a low estimate), but it is evident from the information before us that this increase of population constitutes a burden upon the medical charities of the metropolis. Instead of receiving annually an access of supporters they experience an aggravated demand upon their services, for while the poor flow into London the rich become more and more detached from London. Large residential neighbourhoods have sprung up

TABLE IV.—DISPENSARIES.

Name of dispensary.	Hospital Sunday Fund award.	Out-patients' visits.
Battersea Provident	£60	25,000
Bloomsbury "	7	—
Brixton, &c.	45	19,405
Brompton Provident	18	6,249
Camberwell "	75	94,395
Camden "	9	12,376
Chelsea, Brompton, and Belgrave Provident	36	—
Chelsea Provident	11	2,995
Child's Hill "	8	—
City	75	—
City of London and East London	18	70,797
Clapham General and Provident	19	13,669
Deptford Medical Mission	15	—
Eastern	23	5,711
East Dulwich Provident	11	—
Farringdon General	30	—
Finsbury	24	31,049
Forest Hill	22	7,673
Hackney Provident	6	9,270
Hampstead "	34	—
Holloway and North Islington	45	29,617
Islington	34	13,156
Kensal-town Provident	4	4,585
Kensington	49	5,190
Kilburn, Maida-vale, and St. John's-wood	24	3,381
Kilburn Provident Medical Institution	26	—
London	15	—
London Medical Mission	52	23,046
Margaret-street Infirmary for Consumption	—	8,980
Metropolitan	38	34,007
Notting-hill	7	2,076
Paddington Provident	25	12,832
Pimlico "	11	—
Portland-town	12	5,474
Public	34	16,867
Queen Adelaide's	16	9,038
Royal General	30	11,350
Royal Pimlico Provident	41	—
Royal South London	49	4,726
St. George's and St. James's	34	5,096
St. George's (Hanover-square) Provident	26	2,986
St. John's-wood and Portland-town	28	29,120
St. Marylebone General	38	12,700
St. Pancras and Northern	30	—
South Lambeth, Stockwell, & North Brixton	34	—
Stamford-hill, Stoke Newington, &c.	34	48,881
Tower Hamlets	27	—
Walworth Provident	8	4,516
Wandsworth-common Provident	7	4,260
Westbourne Provident	7	7,630
Western	30	26,062
Western General	97	34,000
Westminster General	20	34,265
Whitechapel Provident	15	20,781
Woolwich "	8	—
Estimated to supply omissions	£1,501	713,211
	—	406,708
Total	£1,501	1,119,919

SUMMARY OF TABLES.

—	Hospital Sunday Fund award.	In-patients.	Relieved.	Cured.	Convalescent homes.	Remaining under treatment.	Died.	Out-patients' visits.	Accidents and emergencies
General Hospitals	£18,958	56,872	17,368	28,212	6,053	3,750	4,918	1,707,855	266,149
Special Hospitals	10,603	30,255	10,458	14,434	2,843	2,464	2,049	1,333,647	35,175
Cottage Hospitals and Convalescent Homes	3,227	25,318	8,375	14,753	66	1,112	223	12,267	644
Dispensaries	1,501	—	—	—	—	—	—	1,119,919	—
Total	£34,289	112,445	36,201	57,399	8,962	7,326	7,190	4,173,688	301,968

in the outskirts of Middlesex, in Surrey, Sussex, and Kent, in Essex, Hertfordshire, Buckinghamshire, and Berkshire, the inhabitants of which are all more or less closely connected with London but whose actual homes are situated as much as 30 or 40 miles from Charing-cross. Railway facilities enable them to work in London and live so far from their workshop—for that is how the great metropolis comes to be regarded by them—that they are removed from intimate encounter with its miseries. These people subscribe for the most part generously to the charitable institutions in the vicinity of their homes, but undoubtedly they do not support the metropolitan hospitals as they would if they lived nearer to them and so by daily contiguity had brought forcibly to their notice the work that is done within their walls. Over large areas of London a well-to-do population has been replaced by dense crowds of poor, so that in many cases a street or a square which 30 or 40 years ago contained a hundred subscribers to the nearest medical charity now houses a thousand would-be or actual recipients of the benefits of that charity. The food is withheld as the number of mouths to be fed increases.

This is the dilemma which has to be faced by those responsible for the management of the metropolitan hospitals and we commend it to the best attention of all who think that the demands made on their behalf are clamorous and ill-founded. The Metropolitan Hospital Sunday Fund strives to meet the circumstances, for appeals in its behalf are made from numerous suburban pulpits to communities who are far removed from the dire necessities mitigated or relieved by the London hospitals. But a glance at the figures shows that the Fund does not mount as it should *pari passu* with the population of London. The increased wealth of London, as proved by the attraction which it is able to exercise over the labouring and ruling classes alike of this and other countries, finds one expression in a high level of luxury among the rich and another in the determination of the well-to-do to live as far from its smoke and turmoil as is compatible with their daily routine, but the Metropolitan Hospital Sunday Fund remains practically stationary. It has apparently settled down to contribute a certain sum annually to the expenses of the London hospitals—i.e., £40,000 inclusive of donations. The following figures show the progress of the Fund and some of the reasons accounting for the fluctuations are appended, the donations being separated from the totals:—

Progress of the Metropolitan Hospital Sunday Fund.

Year.	Totals.	Donations.	Year.	Totals.	Donations.
1873	£27,700	£1844	1886	£40,399	£4817 [2]
1874	29,936	1505	1887	40,607	4130 [4]
1875	26,396	1424	1888	40,379	3080
1876	27,042	1339	1889	41,744	3482
1877	26,082	947	1890	42,814	3991 [5]
1878	24,904	1199	1891	45,330	9019 [6]
1879	26,501	1120	1892	41,512	4429 [7]
1880	30,423	1567	1893	39,290	3652 [8]
1881	31,856	1638	1894	43,679	7717 [9]
1882	34,146	2106	1895	60,361	21,990 [10]
1883	33,935	1980	1896	46,035	3582 [11]
1884	39,329	6410 [1]	1897	41,003	2361 [12]
1885	34,320	2565 [3]	1898	40,397	2617 [13]

[1] In 1884 £4500 was received from the managers of the International Health Exhibition.

[2] In 1885 a special donation of £1000 was received from Dr. James Wakley, Editor of THE LANCET.

[3] In 1886 a further special donation of £1000 was received from Dr. James Wakley.

[4] In 1887 a legacy of £1000 was paid by the executors of the late Dr. James Wakley.

[5] Including legacy of £1003 14*s.* from the executors of the late Mr. Thomas Crouch.

[6] In 1891 donations of £5000 from the late Duke of Cleveland, &c., and £1000 from Sir Savile Crossley, Bart., were received.

[7] In 1892 Sir Savile Crossley gave a further £1000; and a legacy of £105 was paid by the executors of the late Dr. H. E. Price of Brighton.

[8] In 1893 Sir Savile Crossley gave a further donation of £1000.

[9] In 1894 a legacy of £5000 (less duty) was paid by the executors of the late Mr. W. J. Whitaker, and Sir Savile Crossley gave a further donation of £1000.

[10] In 1895 Messrs. Barnato and Friends gave a donation of £10,000; £3400 was received from the Stock Exchange through Messrs. Pym, Vaughan, and Co., and Messrs. Burdett and Harris; Lord Iveagh gave a donation of £1000; Sir Savile Crossley gave a further donation of £1000; and Mr. J. B. Robinson gave £1000.

[11] In 1896 Sir Savile Crossley gave his sixth donation of £1000, and legacies were received from Mr. John Smith of £500 and Mrs. May Evans of £172 9*s.* 4*d.*

[12] In 1897 Sir Savile Crossley gave his seventh donation, amounting this year to £500.

[13] In 1898 Sir Savile Crossley gave his eighth donation, amounting this year to £500.

From these figures it will be seen that 15 years ago the Fund made a sudden leap to the point which it was to maintain for the next decade. In 1884, owing to a magnificent donation of £4500 from the managers of the International Health Exhibition, the sum received was advanced from £33,935 to £39,329. Falling somewhat the next year it was righted again by donations and has since remained at an average figure of a little over £40,000. In 1895 the Fund took an enormous upward leap owing to the joint generosity of the Stock Exchange and of a group of financiers headed by the late Mr. B. I. Barnato. In that year the contributions to the Fund reached the record figure of £60,361, but all efforts to maintain them at this point failed. In 1896 the Fund fell to £46,035 and in 1897 to £41,003, while in 1898 £40,397 were received.

THE METROPOLITAN HOSPITAL SUNDAY FUND AND THE PRINCE OF WALES'S HOSPITAL FUND.

But in 1897 the institution of the Prince of Wales's Hospital Fund formed a remarkable departure in English charity and one that could not fail to be of influence upon the receipts of the Hospital Sunday Fund. For the Fund started by His Royal Highness to commemorate the sixtieth year of Her Majesty's reign ran in so many directions upon exactly parallel lines to the Metropolitan Hospital Sunday Fund that it was impossible that the interests of the two charities should not in some degree clash. The individual donations to the Prince of Wales's Fund during 1897 ranged from 6*d.* to £12,500 and the subscriptions from 1*s.* to £1000 a year. The total sum paid into the credit of the Fund during the 11 months ended Dec. 31st, 1897, was £227,551 12*s.* 5*d.* Of this amount there were contributed in annual subscriptions £21,443 1*s.* 5*d.* The individual donation to the Prince of Wales's Fund during 1898 ranged from a few shillings to £1050 and included such gifts as £1050 from the Mercers' Company, £1000 from an anonymous lady, £1000 from the London Parochial Charities, and £500 each from Lord Rosebery, Sir Savile Crossley, Mr. P. Vans Agnew Reid, and the Skinners' Company. The total sum paid into the credit of the Fund during the year ending Dec. 31st, 1898, was £39,272, of which amount £23,318 8*s.* were annual subscriptions.

It is not improbable that the slight but significant falling off in the receipts of the Hospital Sunday Fund during the last two years may have been, as we expressed a hope that it might not be, due to the influence of the Prince of Wales's Fund. But it is possible that the needs of the hospitals and the importance and merits of the organisation which distributes the Hospital Sunday Fund have been brought by this younger Fund before the notice of some who have hitherto been indifferent and that ultimately the Hospital Sunday Fund will be the gainer; while it must be remembered that the success of the Prince of Wales's Fund to this extent reflects credit upon the Hospital Sunday Fund—that the Prince of Wales's Fund received from its start counsel and an admirable example from the older charity. At the present moment the Council of the Prince of Wales's Hospital Fund contains eight persons—namely, the Lord Mayor of London, the Bishop of London, the Bishop of Rochester, Cardinal Vaughan, the Chief Rabbi, Sir Savile Crossley, Sir Henry Burdett, and Mr. Albert G. Sandeman, who all occupy seats upon the Advisory Council of the Metropolitan Hospital Sunday Fund, so that not only is the aim of the two Funds a common one, but the guarantee that their methods towards this aim will be substantially identical is very strong. Of one thing we are certain. His Royal Highness would deplore the fact

that his und should interrupt the channels of other charities. He has designed to honour his mother's Diamond Jubilee by establishing his Fund in aid of the metropolitan hospitals. If the Jubilee Fund detaches subscribers from the Hospital Sunday Fund the deserters pay their Queen and their Prince no compliment whatever. The objects of each Fund are the same and the needs of the London hospitals would absorb the contributions of two more Funds as large and still be found asking for supplies. To say that there is no competition between the Funds is perhaps no longer quite exact, but the rivalry shows itself in honourable emulation and the object is a common one—the benefiting of the sick poor. Notwithstanding this, we, in making our appeal for the Metropolitan Hospital Sunday Fund, cannot disguise from ourselves that the task is a harder one than formerly, while this year our harvest has to be garnered from partially-gleaned fields. The Council of the Prince of Wales's Hospital Fund for London began to circulate an appeal on May 2nd with the object of increasing to £50,000 the amount available for distribution. Their appeal alluded to the paramount necessity for maintaining the hospitals of the metropolis in an efficient condition, and the official statement of the Council for 1898 shows that the question has been approached in a business-like spirit. With a view to obtaining accurate information as to the condition and the needs of the hospitals a visiting committee, comprising prominent representatives of the medical profession, has been established and their reports have enabled the Council to deal with the funds placed at their disposal in the light of full knowledge upon most essential matters. While writing in behalf of the Hospital Sunday Fund we earnestly and honestly hope that the Council of the Prince of Wales's Fund, having the same object as the great charity which we are advocating, have received the sum for which they appealed a month ago, but it would be idle to pretend that we do not feel that our own labours may in some directions be modified by their recent circular.

RELIGIOUS OBSERVANCE AND THE CARE OF THE SICK.

That the strenuous efforts of the Hospital Sunday Fund render the hospitals of London more capable of carrying out their stupendous task of taking charge of the sick poor of the metropolis no one thinks of gainsaying. London is now a city whose population is as large as that of many entire nations that have played conspicuous parts in the world's history; and the hospitals of London give shelter and medical treatment to all of this vast concourse of people whose physical state requires the needed succour and whose poverty precludes them from obtaining it otherwise. That the system upon which these hospitals are managed is a good one those who have thought most on the subject and are most qualified to speak on it are agreed. Our future king in undertaking a great work with which to commemorate his mother's unique reign could not have made a wiser or a more popular choice than in deciding upon the institution of a Fund on behalf of charities so sorely needed and so noble in design. And yet neither the public as a whole nor the London public give adequate support to the hospitals. The city of London increases in area, in population, and in wealth, but the hospitals can with difficulty keep their doors open and in too many instances have been compelled to reduce their expenses by the most deplorable measure conceivable—the closing of beds.

This is the situation which will be laid before many of our readers by their ministers on Sunday next and the significance of an appeal from so many pulpits should not be lost to any of us. The advocacy of the pastors of different religious denominations has a particular interest and influence because of the close connexion there has always been between religious observance and the care of the sick. The onslaughts of every disease were regarded by primitive man in all climes as direct manifestations of Divine power; whence it followed that the priest or whoever occupied the position of interpreter of the religious rites to the people, being regarded as an intermediary, was at once credited with the possession of therapeutic secrets. Throughout the earlier civilisations the priests, under different names and in very different ways, essayed to play the part of physicians or health officers. The temples of Æsculapius served the ancient Greeks as out-patient departments. The law of Moses was nearly as much concerned with the public health of the Jewish nation as with their spiritual well-being. Christ's charge to His disciples as He sent them forth on their missionary errand was that they should "preach the kingdom of God and heal the sick." In the early Christian Church we find a definite order of church officers—the *parabolani*—who fulfilled the duty of hospital attendants and nurses to the sick poor, relieving them out of the alms of the faithful. The *parabolani* are said to have received their name from the Greek word παραβάλλεσθαι, which had the meaning to expose oneself to danger or to stake one's life upon the cast, signifying the willingness with which they sacrificed their lives in time of plague and contagious disease; so that if in the hierarchy of the church they had but a subordinate position it was clearly one of honourable regard. Later the deacons of the Christian Church, often called Levites from the resemblance of their duties, which were ministerial rather than sacerdotal, to the duties of the Levites among the Jews, in their capacity of almoners of the charity dispensed by the church became the medical attendants of the sick poor. To come to times comparatively near our own we have in the *hospitium* attached to the monasteries and various religious houses of mediæval Europe a fairly exact forerunner of our present hospitals. Here the travel-worn were received, sometimes only on presentation of the proper letters of recommendation, and here the sick remained until they were well enough to resume their journey. The monasteries also preserved for us the ancient learning, from which it must be remembered the spirit of the modern learning has been derived, as well as facilities for its acquisition, while the monks were the refuge of the sick villager in the time of need. Ancient medical learning was inexact and monasterial simples may not always have been efficacious in their ingredients, but the union between religious observance and the care of the sick was here very plainly illustrated. And now, coming to the present day, who knows so much of the sick poor and who is so intimately concerned with their plight as the clergyman or minister of their churches? The medical man's knowledge of his patient in many directions goes further than it is necessary or perhaps advisable for the knowledge of anyone not a medical man to go, but the clergyman is aware of matters regarding the environment of the sick poor which do not necessarily enter into the purview of the medical adviser and concerning which he has no time to think. Year by year the admirable and eloquent appeals of the London clergy of all denominations are directed to the raising of the Metropolitan Hospital Sunday Fund. Year by year their appeals make clear to the congregations that in their opinion the claim of the hospitals is imperative and one to which no professingly religious person can close his or her ears. *Remember that they speak from knowledge!* The figures which we place before our readers to-day constitute in themselves knowledge, but our metropolitan clergy have a deeper, closer intimacy with the working of the medical charities of London than can be gained by a mere study of figures, however elaborate and conclusive.

ALL MUST HELP.

Such is our appeal on behalf of the Metropolitan Hospital Sunday Fund and we have purposely directed it rather towards the reason than towards the sentiment of our

readers. We have taken it for granted that no words are necessary to bring home to our readers the terrible misery which sickness means to the poor man and poor woman. The incapacity of the breadwinner to earn his wages at once places the family of the poor man within a measurable distance of starvation. That little distance would be immediately crossed if the hospital did not open its doors to the sufferer. And now a time has arrived when many beds are closed and many of these unfortunate people have to be refused the shelter which means so much to them and so much, perhaps as much, to their families. It is the lives of the poor for which we are pleading.

The rich should give out of their superfluity, and not only because they are rich, but because they are themselves directly benefited by the hospitals. For without our hospitals the benefits which the rich derive from skilled medical attendance could not be theirs. Assuredly also if the London hospitals cannot be kept working at a high level of efficiency by the spontaneous donations of the generous a state or municipal management will be substituted for the voluntary system which has hitherto worked so well. For hospitals are an integral part of modern civilisation and the community which does not obtain their services in one way will bestir itself to get them in another. Then it will be upon the rich that the rate will be levied: now they should levy it to some extent upon themselves.

The poor should give out of their poverty, and they need no reminding as to what the hospital means to them when they are sick. But they need much reminding as to the value of little gifts, or the Metropolitan Hospital Sunday Fund would not stand at the annual figure of £40,000. If there are half a million persons in London to whom an annual subscription of 1*d.* is impossible there must be at least 2,000,000 others, who are poor in that they are living on their wages, who could still afford an annual gift of 1*s.* If they gave that shilling each year the hospitals would soon be placed well on their way to freedom from debt. As a matter of fact the poor in their numbers do not contribute at all to the support of the hospitals. And this is not as it should be.

To the benevolent man no scheme can commend itself as more worthy of his assistance than a fund to benefit his suffering and poorer brethren.

In the eyes of the practical man no less than in those of the benevolent the Fund should, nay must, find favour for it represents order in the distribution of charity. The Metropolitan Hospital Sunday Fund can put forward strong claims to support as an economic agency. While at present there is no great chance, in spite of considerable discussion of the subject, that such a Central Hospital Board as was advocated by the Special Committee of the House of Lords will be created, the Council of the Metropolitan Hospital Sunday Fund have been in a position to accomplish much by way of suggestion and criticism to advance the interests of coöperation among the various charities. They have exercised a gentle but most salutary supervision over hospital expenditure and by comparison and scrutiny have enforced the admirable doctrine that every pound of revenue should be represented by its equivalent in the form of service or of necessaries supplied to the objects of the charitable institution. In this way they have accomplished and are accomplishing a task that no private benefactor, however strenuous against abuse, could attempt. They speak with the authority of numbers and are free from suspicion of partiality. Therefore the public, feeling generally well disposed towards the hospitals of London, cannot place their contributions in better hands. By delegating to the Metropolitan Hospital Sunday Fund the task of distribution they can avail themselves of a discretion perfected by collective knowledge to which no individual among them could hope to attain.

With regard to the work of the Metropolitan Hospital Sunday Fund as an economic agency we are able to speak with particular clearness. We issue every year questions to the hospital authorities as to the number of in-patients received, the number discharged, the number relieved, the number cured, the number sent to convalescent homes, the number of individual out-patients seen, and the number of cases treated upon emergency. These questions have always been most fully and promptly answered by the hospital authorities, and from the statistical information thus obtained the various tables are prepared which will be found in this Supplement. A comparison can thus be made between our figures and the figures forthcoming from the inquiries of the Metropolitan Hospital Sunday Fund and any grave discrepancy would lead to further investigation. In this way we arrive at the position of being able to speak with knowledge when we say that the Metropolitan Hospital Sunday Fund represents order in the distribution of charity.

To all orders of mind, to all social grades, and to all creeds alike the Metropolitan Hospital Sunday Fund must appear as a noble charity splendidly directed, economically managed, and equitably administered. Therefore GIVE.

THE METROPOLITAN HOSPITAL SUNDAY FUND.

Amounts received and disbursed in the year 1898.

Dr. RECEIPTS *for the year ending 31st October, 1898.*

1898.	£	s.	d.	£	s.	d.
To Collections made at Sundry Places of Worship	36,513	17	8			
,, Collections at Schools	19	1	3			
,, Donations, including £16 14*s.* 0*d.* for Surgical Appliances	2,617	3	7			
,, Dividend on £45,346 1*s.* 3*d.* 2½ Consols, per Executors to the Will of W. A. Guesdon, deceased	1,247	0	4			
				40,397	2	10
				£40,397	2	10

Cr. PAYMENTS *for the year ending 31st October, 1898.*

1898.	£	s.	d.	£	s.	d.
By Balance overdrawn, 1st Nov., 1897	830	16	2			
Less in hands of Secretary	21	6	10			
				809	9	4
,, Awards to 125 Hospitals	32,218	16	11			
,, Awards to 7 Institutions	495	0	0			
,, Awards to 54 Dispensaries	1,498	13	6			
,, Surgical Appliances	2,229	15	0			
				36,442	4	11
,, Rent	170	0	0			
,, Fuel, Gas, and Office Cleaning	21	19	10			
,, Printing and Stationery	242	7	10			
,, Stamps and Postage	83	4	9			
,, Advertisements	241	11	8			
,, Salaries and Gratuities	884	16	0			
,, Sundries	5	7	10			
				1,649	7	11
,, Special Expenses—Special Church and Chapel Appeals				58	8	0
,, Balance at Bank of England, 31st Oct., 1898	1,421	1	11			
,, Balance in hands of Secretary	16	10	9			
				1,437	12	8
				£40,397	2	10

Audited and found correct this 27th day of November, 1898.
(Signed) W. H. PANNELL & Co., *Chartered Accountants*, 13, Basinghall-street, E.C.

*** In the preparation of the voluminous statistics of hospital work which have been here digested and exhibited in collected form (and which have been specially supplied to us in response to our applications, and are quite independent of any returns made to the Metropolitan Hospital Sunday Fund Committee) we have been greatly indebted to a large number of secretaries and other officers of the various medical charities of the metropolis. To them we desire, as on many previous occasions, to tender our sincere thanks.—ED. L.

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